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1	-		performed		!

## **BIOLOGICAL TESTING**

I.	WATER			
1.	Drinking Water	Total Coliforms/ Coliform Count/ Coliform Bacteria	APHA9221-B, 9-69	<1.1to1.6 x10 <sup>8</sup> MPN index /100 ml
	Water for Swimming Pools and Spas		IS 1622	<2 to >1600MPN index /100 ml
	Water for Construction Purpose		APHA 9222-B, 82	≥ 1 CFU/100 ml
   	Water from purifiers		IS1622	≥ 1 Coliform/100 ml
	Ground water /Surface water / Sea water		APHA 9221-D,9-75	Qualitative (Present or Absent / 100 ml)
	Water for Medicinal purposes (including Pharma)	Faecal Coliforms	APHA 9221-E, 9-77	<1.1 to 1.6 x10 <sup>8</sup> MPN index /100 ml
   	Distilled / demineralized water		IS 1622 APHA9222-D, 9-89	<2 to >1600MPN index /100 ml > 1 CFU/100 ml
	Water for Processed food industry	Total Viable Count/Total Plate Count/Total Bacterial Count/Standard plate Count/ Aerobic Microbial Count/Aerobic bacterial Count /Aerobic Plate Count / Heterotrophic Plate Count	APHA9215-B,9-56	<u>2 1 CFU/ml</u>   <u>&gt;</u> 1 CFU/ml

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   	Water for Industrial	Total Viable Count/Total Plate Count/Total	IS 15188	<u>&gt;</u> 1 CFU/100 ml
	purpose	Bacterial Count/Standard   plate Count/ Aerobic   Microbial Count/Aerobic   bacterial Count / Aerobic   Plate Count / Heterotrophic Plate Count	Indian Pharmacopeia 2.2.9	≥1 CFU/mI
	Water for Ice	Yeast and Mould Count	IS 5403	> 1 CFU/ml
	Manufacture		Indian Pharmacopeia 2.2.	>1 CFU/ml
         	Water for Fermentation industry	Escherichia coli	APHA9221-G, 9-80	<1.1 to 1.6 x10 <sup>8</sup> MPN index /100 ml Present or Absent/100 ml
 	Irrigation water /Cooling purpose water	Escherichia coli	IS1622   IS 4251	<pre>&lt;2 to &gt;1600MPN index /100 ml Present or Absent/100 ml</pre>
 			Indian Pharmacopeia	Qualitative
ļ ———-	<u> </u>	<u></u>	2.2.9,2018	(Present or Absent/ ml)
	 <del> </del>	Proteolytic organisms	IS 4251	<u>&gt; 1 CFU/ml</u>
 	 <del> </del>	Lipolytic organisms	IS 4251	<u>&gt;</u> 1 CFU/ml
   		Thermophilic Bacterial Count	IS 4251	≥1 CFU/mI
       	 	Clostridium welchii (perfringens)	IS 1622	Qualitative (Present or Absent/ 100 ml)
		Faecal <i>Streptococci</i>	IS15186	Qualitative (Present or Absent/100 ml)
		Faecal <i>Streptococci</i>	АРНА9230-В,9-118	<1.1 to 1.6 x10 <sup>8</sup> MPN index /100 ml =

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	<del> </del>		IS 1622	<2 to >1600MPN index
<u></u>	<u> </u>	<u>i</u>	<u>i</u>	/100 ml
L	<u> </u>	<u> </u>	LIS1622	<u>&gt;</u> 1 CFU/ 100 ml
L	<u> </u>	<u> </u>	IS 15186	<u>&gt;</u> 1 CFU/ 100 ml
 		Pseudomonas aeruginosa	Annex D of IS 13428	Qualitative
   			 	(Present or Absent/100 ml)
   			Annex D of IS 13428& IS 15188	<1 to 18MPN index/100 ml
   	<del> </del>	†   	Indian Pharmacopeia	Qualitative (Present or Absent/ ml)
	<del> </del>	Salmonella spp.	APHA, 23 <sup>rd</sup> Ed., 2017,9260-	Qualitative
		 	B,9-152	(Present or Absent/100 ml)
	†     		IS 15187:2016	Qualitative (Present or Absent/100 ml)
   	   		Indian Pharmacopeia	Qualitative (Present or Absent/ ml)
	†	Shigellaspp.	APHA9260-E,9-157	Qualitative (Present or Absent /100 ml)
       	†       	Staphylococcus aureus	APHA9213-B,9-48	Qualitative (Present or Absent/100 ml)
   	   	   	Indian Pharmacopeia	Qualitative (Present or Absent/ml)
     	 	Sulphite reducing anaerobes	Annex C of IS 13428	Qualitative (Present or Absent/ 50 ml)
	†   	Sulphite reducing anaerobes	Annex C of IS 13428& IS 15188	<1 to 180 MPN index /100 ml
	<del> </del>	Vibrio cholerae	APHA9260-H,9-167	Qualitative(Present or Absent /100 ml)

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Vibrio parahaemolyticus	IS 5887 (Part V)	Qualitative (Present or Absent /100 ml)
2.	Packaged Drinking Water	Escherichia coli (Thermotolerant bacteria)	IS 15185:2016	Qualitative (Present or Absent/250 ml)
3.	Packaged Natural Mineral Water	Coliforms	IS 5401 (Part 1)	Qualitative (Present or Absent/250 ml)
       			IS 15185	Qualitative (Present or Absent/250 ml)
       		FaecalStreptococci (Enterococci)	IS 5887 (Part II)	Qualitative (Present or Absent/250 ml)
       	     		IS 15186	Qualitative (Present or Absent/250 ml)
       		Staphylococcus aureus	IS 5887 (Part II)	Qualitative (Present or Absent/250 ml)
   	   	Sulphite reducing anaerobes	Annex C of IS 13428	Qualitative (Present or Absent/50ml)
       		Pseudomonas aeruginosa	Annex D of IS 13428	Qualitative (Present or Absent/250 ml)
   		Aerobic Microbial Count at 20 to 22 °C in 72 h	IS 5402	≥ 1 CFU/mI
   	   	Aerobic Microbial Count at 37°C in 24 h	IS 5402	≥ 1 CFU/mI
         		Yeast and Moulds	IS 5403	Qualitative (Present or Absent/250 ml)

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Salmonella spp.	IS 15187	Qualitative (Present or Absent/250 ml)
		Shigellaspp.	IS 5887 (Part 7)	Qualitative (Present or Absent/250 ml)
		Vibrio cholerae	IS 5887 (Part V)	Qualitative (Present or Absent/250 ml)
         		Vibrio parahaemolyticus	IS 5887 (Part V)	Qualitative (Present or Absent/250 ml)
II.	POLLUTION AND E	NVIRONMENT		
1.	Effluents, Sewage, Waste	Total Coliforms/ Coliform Count/ Coliform Bacteria	APHA9221-B,9-69	<1.1 to 1.6 x 10 <sup>8</sup> MPN index /100 ml
   	Water		IS1622	<2 to >1600MPN index /100 ml
   		Faecal Coliforms	APHA9221-E,9-77	<1.1 to 1.6 x 10 <sup>8</sup> MPN index /100 ml
   		   	IS1622	<2 to >1600MPN index /100 ml
		Total Viable Count/Total Plate Count/Total Bacterial Count/Standard plate Count/ Aerobic Microbial Count/Aerobic bacterial Count /Aerobic Plate Count / Heterotrophic Plate Count	APHA9215-B,9-56 IS1622	<u>≥</u> 1 CFU/mI
           		E.coli	APHA9221-G, 9-80	<1.1 to 1.6 x 10 <sup>8</sup> MPN index /100 ml Present or Absent /100 ml

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			IS1622 IS 4251	<2 to >1600MPN index /100 mlPresent or Absent /100 ml
         		Clostridium welchii (perfringens)	IS1622	Qualitative (Present or Absent /100 ml)
     		FaecalStreptococci	IS 15186	Qualitative (Present or Absent/100 ml)
		Faecal Streptococci	APHA9230-B, 9-118	<1.1 to 1.6 x 10 <sup>8</sup> MPN index /100 ml
	 	 	IS 1622	<2 to >1600MPN index /100 ml
<u></u>	<del> </del>	<del> </del>	IS1622 IS 15186	≥ 1 CFU/100 ml > 1 CFU/100 ml
     		Pseudomonas aeruginosa	Annex D of IS 13428	Qualitative (Present or Absent/100 ml)
		†   	Annex D of IS 13428&IS 15188	1 to 18 MPN index /100 ml
		Salmonella spp.	APHA9260-B,9-152	Qualitative (Present or Absent/100 ml)
     		     	IS 15187	Qualitative (Present or Absent/100 ml)
     		Shigellaspp.	APHA9260-E,9-157	Qualitative (Present or Absent /100 ml)
		Staphylococcus aureus	APHA9213-B,9-48	Qualitative (Present or Absent/100 ml)

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		Sulphite reducing anaerobes	Annex C of IS 13428	Qualitative (Present or Absent/ 50 ml)
 	 		Annex C of IS 13428 & IS 15188	1 to 180MPN index /100 ml
   		Vibrio cholerae	APHA9260-H,9-167	Present or Absent /100 ml
   		Vibrio parahaemolyticus	IS 5887 (Part V)	Present or Absent /100 ml
<b>2.</b>	Air Monitoring for Microbial contamination Plate Exposure Surface Swabs	Total Viable Count/Total Plate Count/Total Bacterial Count/Standard plate Count/ Aerobic Microbial Count/Aerobic bacterial Count /Aerobic Plate Count / Heterotrophic Plate Count	USP ISO 18593 IS 5402 AEC/B/SAP/MS-1 AEC/B/SAP/MS-2, Issue Date: 01.04.2018	≥ 1 CFU/m³   ≥10 CFU/cm²   ≥10 CFU/swab   ≥1CFU/plate
             	Bioburden (Classified and Non-classified area)	Yeast &Mould Count/ Total Fungal Count	AEC/B/SAP/MS-1 AEC/B/SAP/MS-2,Issue Date: 01.04.2018	≥ 1 CFU/m³ ≥10CFU/cm² ≥10CFU/swab ≥1CFU/plate
             		Total Coliforms/ Coliform Count/ Coliform Bacteria	USP, ISO 18593 IS 5401 (Part 1) RA 2007/ISO 4832:1991 AEC/B/SAP/MS-1 AEC/B/SAP/MS-2, Issue Date: 01.04.2018	≥ 1 CFU/m³   ≥10 CFU/cm²   ≥10 CFU/swab
		Escherichia coli	USP, ISO 18593IS 5887(Part I) AEC/B/SAP/MS-1 AEC/B/SAP/MS-2,Issue Date: 01.04.2018	≥ 1 CFU/m³   ≥ 10 CFU/cm²   ≥10 CFU/swab   Present or Absent/   cm²orswab

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		Staphylococcus aureus	USP, ISO 18593 IS 5887 (Part II) AEC/B/SAP/MS-1 AEC/B/SAP/MS-2,Issue Date: 01.04.2018	≥ 1 CFU/m³ ≥10 CFU/cm² ≥10 CFU/swab Present or Absent/ cm²/swab
		Pseudomonas aeruginosa	USP, ISO 18593 IS 14843 AEC/B/SAP/MS-1 AEC/B/SAP/MS-2,Issue Date: 01.04.2018	≥ 1 CFU/m³ ≥ 10 CFU/cm² ≥10 CFU/swab
           		Clostridium spp.	USP, ISO 18593 IS 5887 (Part 4) AEC/B/SAP/MS-1 AEC/B/SAP/MS-2,Issue Date: 01.04.2018	≥1 CFU/m³ Present or Absent/ cm²/swab
             		Salmonella spp.	USP, ISO 18593 IS 5887(Part 3) AEC/B/SAP/MS-1 AEC/B/SAP/MS-2,Issue Date: 01.04.2018	≥1 CFU/m³ Present or Absent/ cm²/swab
		Listeria monocytogenes	USP, ISO 18593 US FDA BAM, Chapter 10, IS 14988(Part :1) AEC/B/SAP/MS-1 AEC/B/SAP/MS-2,Issue Date: 01.04.2018	≥1 CFU/m³ Present or Absent/ cm²/swab
3.	Compressed Air	Total Viable Count/Total Plate Count/Total Bacterial Count/Standard plate Count/ Aerobic Microbial Count/Aerobic bacterial Count / Aerobic Plate Count /	ISO 8573 (Part 7)	≥ 1 CFU/m <sup>3</sup>

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ļ	Ţ	Heterotrophic Plate Count		<u> </u>
	†   	Yeast &Mould Count/ Total Fungal Count	ISO 8573 (Part 7)	≥ 1 CFU/m <sup>3</sup>
III.	FOOD & AGRICULT		 	
1. 1.	Milk and Dairy Products Infant Foods	Total Viable Count/Total Plate Count/Total Bacterial Count/Standard plate Count/ Aerobic Microbial Count/Aerobic bacterial Count /Aerobic Plate Count /	IS 5402:2012	≥ 10 CFU/g or ≥1 CFU/ml
   	     	Heterotrophic Plate Count	USFDABAMChapter 3	≥ 10 CFU/gor   > 1 CFU/ml
         	 	Total Coliforms/ Coliform Count/ Coliform Bacteria	IS 5401 (Part 1)/ ISO 4832	≥ 10 CFU /g or ≥ 1 CFU/ml Present or Absent/ 0.1 g
   			IS 5401 (Part 2)/ ISO 4831	<0.3 to 1.1x10 <sup>6</sup> MPN index/g or ml
   	 	 	USFDABAMChapter 4	≥ 10 CFU/ g or ≥ 1 CFU /ml
   		Yeast and Mould Count	IS 5403	≥ 10 CFU/g or ≥ 1 CFU/ml
	   	 	USFDABAMChapter 18	≥ 10 CFU /g or ≥ 1 CFU/ml
		Escherichia coli (Thermotolerant bacteria)	IS 5887(Part I)	Qualitative (Present or Absent / 25g or 25 ml Present or Absent /0.1 g or ml Present or Absent /1 g or ml)
		 	IS 5887(Part I)	≥ 10 CFU /g or

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	T			≥ 1 CFU/ml
	T			0.3 to 1.1x10 <sup>6</sup> MPN
İ				index/g or ml
	T		USFDABAMChapter 4	<3 to 1.1x10 <sup>6</sup> MPN
ļ				index /g or ml
   		Clostridium perfringens	IS 5887 (Part 4) USFDABAMChapter 16	Present or Absent / 25 g or 25 ml
	   	Clostridium perfringens	IS 5887 (Part 4) USFDABAM Chapter 16	> 10 CFU/g or > 1 CFU/ml
		Sulfite reducing bacteria growing under anaerobic conditions/Sulphite reducing Clostridia	ISO 15213	≥ 10 CFU/g
	<del> </del>	Faecal	IS 5887 (Part II)	Qualitative
		Streptococci	, ,	(Present or Absent / 25
 		(Enterococci)		g or 25 ml)
	<u> </u>	Faecal Streptococci	IS 5887 (Part II)	≥ 10CFU/g or
ļ				≥ 1 CFU/ml
   		Pseudomonas aeruginosa	IS 14843/ ISO 13720	≥10 CFU/g or ≥ 1 CFU/ml
		Salmonella spp.	IS 5887(Part 3)	Qualitative
į		į	USFDA,BAMChapter 6	(Present or Absent / 25
L	 	 	ISO 6579	g or 25 ml)
 	 	Shigellaspp.	IS 5887(Part 7)	Qualitative
į		į	USFDA,BAMChapter 6	(Present or Absent / 25
L	 <del> </del>	L	 	g or 25 ml)
 		Staphylococcus aureus	IS 5887 (Part II)	Qualitative
		(Coagulase positive)		(Present or Absent/25g
İ				or 25 ml
 				Present or Absent /0.1 g
į	İ	į		or ml
 		] 	 	Present or Absent / 1 g
<u> </u>	<del></del>	<u> </u>		or ml)
L	Ĺ	Staphylococcus	IS 5887 (Part II)	<u>&gt;</u> 10 CFU /g

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	<del>                                     </del>	aureus(Coagulase positive)	IS 5887(Part 8/Sec 1)/ ISO 6888 -1, US FDA BAM Chapter 12	≥ 1 CFU/ml
   	 	Enterobacteriaceae	IS/ISO 7402	≥ 10 CFU /g or ≥ 1 CFU/ml
     	     	Vibrio cholerae	IS 5887(Part V) US FDA BAMChapter 9	Qualitative (Present or Absent / 25 g or 25 ml)
		Vibrio parahaemolyticus	IS 5887 (Part V) US FDA BAMChapter 9	Qualitative (Present or Absent / 25 g or 25 ml)
		Listeria monocytogenes	US FDA BAM Chapter 10 IS 14988(Part1)	Qualitative (Present or Absent / 25 g or 25 ml Present or Absent / 1 g or ml)
	   	Bacillus cereus (Aerobic spore count)	IS 5887(Part 6) ISO 7932	> 10 CFÚ/g > 1 CFU/ml
   	 	Aflatoxin M1	ELISA Method, SOP No. AEC/B/SAP/F-19	<u>&gt;</u> 0.125 µg/kg
		Enterobactersakazaki	ISO 22964	Present or Absent / 25 g or 25 ml Present or Absent / 10 g or ml Present or Absent / 1 g or ml
		Lactic acid bacteria in Yoghurt	IS 12899	≥ 10 CFU/g ≥ 1 CFU/ml
2.	Edible Oils and	Total Viable Count/Total	IS 5402	<u>&gt;</u> 10 CFU /g

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	Fats	Plate Count/Total Bacterial Count/Standard plate Count/ Aerobic Microbial Count/Aerobic bacterial Count /Aerobic Plate Count / Heterotrophic Plate Count	US FDA BAM Chapter 3	≥ 10 CFU /g
   	   	Total Coliforms/ Coliform Count/ Coliform Bacteria	IS 5401 (Part 1) / ISO 4832	≥ 10 CFU /g
			IS 5401 (Part 2)/ ISO 4831 US FDA BAMChapter 4	<pre>&lt;0.3 to 1.1x10<sup>6</sup>MPN index/g ≥ 10 CFU/ g or ≥ 1 CFU /ml &lt;3 to 1.1x10<sup>6</sup> MPN index /g</pre>
F	T L	Yeast and Mould Count	IS 5403	≥ 10 CFU/g
     	     	Escherichia coli (Thermotolerant bacteria)	US FDA BAMChapter 18 IS 5887(Part I)	≥ 10 CFU/g Present or Absent / 25 g Present or Absent /1 g
     	 	Escherichia coli	IS 5887 (Part I)	> 10 CFU /g 0.3 to 1.1x10 <sup>6</sup> MPN index /g
	   	     	US FDA BAMChapter 4	<3 to 1.1x10 <sup>6</sup> MPN index /g
	 	Clostridium perfringens	IS 5887 (Part 4) US FDA BAMChapter 16	Qualitative (Present or Absent/25g)
   		Clostridium perfringens	IS 5887 (Part 4) US FDA BAM Chapter 16	≥ 10 CFU/g ≥ 10 CFU/g
           	           	Sulfite reducing bacteria growing under anaerobic conditions/Sulphite reducing Clostridia	ISO 15213	≥ 10 CFU/g
<u> </u>	<del> </del>	Faecal Streptococci	IS 5887 (Part II)	Qualitative

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		(Enterococci)		(Present or Absent /25g)
	 	Faecal Streptococci	IS 5887 (Part II)	≥ 10CFU/g
		Pseudomonas aeruginosa	IS 14843/ ISO 13720	≥10 CFU /g
       		Salmonella spp.	IS 5887(Part 3) US FDA BAMChapter 6ISO 6579	Qualitative (Present or Absent/25 gor25ml)
     		Shigellaspp.	IS 5887(Part 7) US FDA BAMChapter 6	Qualitative (Present or Absent/25g)
		Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II):1976, RA 2018	Qualitative (Present or Absent/25g)
         		Staphylococcus aureus(Coagulase positive)	IS 5887 (Part II) IS 5887(Part 8/Sec 1)/ ISO 6888 -1 US FDA BAM Chapter 12	≥ 10CFU /g
   		Vibrio cholerae	IS 5887(Part V) US FDA BAMChapter 9	Qualitative (Present or Absent/25g)
   	     	Vibrio parahaemolyticus	IS 5887 (Part V) US FDA BAMnm Chapter 9	Qualitative (Present or Absent/25g)
   	<del> </del> -	Enterobacteriaceae	IS/ISO 7402	≥ 10 CFU /g or > 1 CFU/ml
	   	Listeria monocytogenes	US FDA BAM Chapter 10 IS 14988(Part :1)	Present or Absent/25g
		Bacillus cereus	IS 5887(Part 6) ISO 7932	≥ 10 CFU/g
3.	Oil Seeds and By-	Total Viable Count/Total	IS 5402	≥ 10 CFU /g

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 	products	Plate Count/Total Bacterial Count/Standard plate Count/ Aerobic Microbial Count/Aerobic bacterial Count /Aerobic Plate Count / Heterotrophic Plate Count	US FDA BAMChapter 3	≥ 10 CFU /g
   	† ! !	Total Coliforms/ Coliform Count/ Coliform Bacteria	IS 5401 (Part 1) / ISO 4832	≥ 10 CFU /g
     			IS 5401 (Part 2)/ ISO 4831 US FDA BAMChapter 4	<0.3 to 1.1x10 <sup>6</sup> MPN index/g > 10 CFU/ g <3 to 1.1x10 <sup>6</sup> MPN index /g
<u> </u>	<del> </del>	Yeast and Mould Count	IS 5403	≥ 10 CFU/g
ļ·	<del> </del>		US FDA BAMChapter 18	> 10 CFU/g
     	†	Escherichia coli (Thermotolerant bacteria)	IS 5887(Part I)	Qualitative (Present or Absent/25g Present or Absent/1g)
 	†   	Escherichia coli	IS 5887 (Part I)	> 10 CFU /g 0.3 to 1.1x10 <sup>6</sup> MPN index /g
   	<del> </del>	<del> </del>   	US FDA BAMChapter 4	<3 to 1.1x10 <sup>6</sup> MPN index /g
		Clostridium perfringens	IS 5887 (Part 4) US FDA BAMChapter 16	Qualitative (Present or Absent/25 g)
   	   	Clostridium perfringens	IS 5887 (Part 4) US FDA BAMChapter 161	≥10 CFU /g
		Sulfite reducing bacteria growing under anaerobic conditions/Sulphite reducing Clostridia	ISO 15213	≥ 10 CFU /g
L	<u> </u>	FaecalStreptococci	IS 5887 (Part II)	Qualitative

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	<u> </u>	(Enterococci)		(Present or Absent/25g)
	<u> </u>	Faecal Streptococci	IS 5887 (Part II)	> 10CFU/g
   	   	Pseudomonas aeruginosa	IS 14843/ ISO 13720	≥10 CFU/g
       		Salmonella spp.	IS 5887(Part 3) US FDA BAMChapter 6 ISO 6579	Present or Absent / 25 g or 25 ml Present or Absent / 'x' g or 'x' ml
       		Shigellaspp.	IS 5887(Part 7) US FDA BAM Chapter 6	Qualitative (Present or Absent/25 g)
   	   	Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II)	Qualitative (Present or Absent/25g)
		Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II) IS 5887(Part 8/Sec 1)/ ISO 6888 -1 US FDA BAMChapter 12	≥ 10CFU/g
     	†	Vibrio cholerae	IS 5887(Part V) US FDA BAMChapter 9	Qualitative (Present or Absent/25 g)
   	   	Vibrio parahaemolyticus	IS 5887 (Part V) US FDA BAMChapter 9	Qualitative (Present or Absent/25 g)
   	<del> </del>	Enterobacteriaceae	IS/ISO 7402	≥ 10 CFU /g or > 1 CFU/ml
	<del>                                     </del>	Listeria monocytogenes	US FDA BAM Chapter 10 IS 14988(Part 1)	Present or Absent / 25 g
   	<del> </del>   	Bacillus cereus	IS 5887(Part 6) ISO 7932	≥ 10 CFU/g
		Moulds	AEC/B/SAP/F-17, Issue no.: 04,Issue date: 01.04.2018 Visual Method	Present/Absent
	 	Total Aflatoxins	FSSAI Manual 2016,Clause	<u>&gt;</u> 1.7 μg/kg

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			No.8, Page No.25 ELISA Method, SOP No. AEC/B/SAP/F-13 Issue Date: 01.04.2018	
4.	Fruit & Fruit Products	Total Viable Count/Total Plate Count/Total	IS 5402	> 10 CFU/g or >1 CFU/ml
		Bacterial Count/Standard plate Count/ Aerobic Microbial Count/Aerobic bacterial Count /Aerobic Plate Count / Heterotrophic Plate Count	US FDA BAM Chapter 3	≥ 10 CFU/g or ≥1 CFU/mI
		Total Coliforms/ Coliform Count/ Coliform Bacteria	IS 5401 (Part 1)/ ISO 4832	≥ 10 CFU /g or ≥ 1 CFU/ml
	       		IS 5401 (Part 1) / ISO 4832	Qualitative (Presence/Absence/100 ml)
	<del> </del>   		IS 5401 (Part 2)/ ISO 4831	<0.3 to 1.1x10 <sup>6</sup> MPN index/g or ml
			US FDA BAMChapter 4	≥ 10 CFU/ g or ≥1 CFU/ml <3 to 1.1x10 <sup>6</sup> MPN index /g or ml
	 	Yeast and Mould Count/Mould Count	IS 5403	≥ 10 CFU/g or   ≥ 1 CFU/ml
	   	   	US FDA BAM Chapter 18	≥ 10 CFU/g or ≥ 1 CFU/ml
		Escherichia coli (Thermotolerant bacteria)	IS 5887(Part I)	Qualitative (Present or Absent / 25g or 25ml) Qualitative (Present or Absent/ 1 g or 1 ml /0.1 g or 0.1 ml)
		Escherichia coli	IS 5887(Part I)	≥10CFU /g or

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	T			≥ 1 CFU /ml
	T			0.3 to 1.1x10 <sup>6</sup> MPN
<u> </u>	<u> </u>	<u>i</u>	<u> </u>	index /g or ml
			US FDA BAMChapter 4	<3 to 1.1x10 <sup>6</sup> MPN
	<u>i</u>	<u>i</u>	<u>i</u>	index/g or ml
	 	Clostridium perfringens	IS 5887 (Part 4) US FDA BAM Chapter 16	Qualitative (Present or Absent / 25 g or 25ml)
	<del> </del>	Clostridium perfringens	IS 5887 (Part 4)	≥ 10 CFÚ /g or
	<del> </del>	Sulfite reducing bacteria	US FDA BAMChapter 16 ISO 15213	≥ 1 CFU /ml
       		growing under anaerobic conditions/Sulphite reducing Clostridia	150 15215    -  -	≥ 10 CFU /g or   ≥ 1 CFU/ml
	†	FaecalStreptococci	IS 5887 (Part II)	Qualitative
		(Enterococci)		(Present or Absent / 25 g or 25 ml)
	<del> </del>	Faecal Streptococci	IS 5887 (Part II)	≥ 10 CFU/g or > 1CFU /ml
ļ		Shigellaspp.	IS 5887(Part 7)	Qualitative
			US FDA BAM Chapter 6	(Present or Absent / 25 g or 25ml)
   	<del> </del>   	Pseudomonas aeruginosa	IS 14843/ ISO 13720	≥ 10 CFU/g or > 1 CFU /ml
		Salmonella spp.	IS 5887(Part 3) US FDA BAM Chapter 6	Qualitative (Present or Absent / 25 g or 25 ml)
 	 	 	 	Present or Absent / 'x' g or 'x' ml
		Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II)	Present or Absent/25 g or 25 ml
<b> </b>	<del> </del>	Staphylococcus aureus	IS 5887 (Part II)	≥ 10 CFU /g or

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	       	(Coagulase <i>p</i> ositive)	IS 5887(Part 8/Sec 1)/ ISO 6888 -1 US FDA BAMChapter 12	≥ 1 CFU /ml
   		Vibrio cholerae	IS 5887(Part V) US FDA BAMChapter 9	Present or Absent /25 g or 25 ml
   	   	Vibrio parahaemolyticus	IS 5887 (Part V) US FDA BAMChapter 9	Present or Absent/ 25 g or 25 ml
		Enterobacteriaceae	IS/ISO 7402 ISO 21528-1 ISO 21528-2	≥ 10 CFU /g or ≥ 1 CFU/ml Present or Absent/ 25 g or 25 ml ≥ 10 CFU /g or ≥ 1 CFU/ml
   		Listeria monocytogenes	US FDA BAM Chapter 10 IS 14988 (Part :1)	Present or Absent / 25 g or 25 ml
   		Bacillus cereus	IS 5887(Part 6), ISO 7932	≥ 10 CFU/g or ≥ 1 CFU / ml
     	     	Incubation at37°C for 10 days and 55°C for 7 days	APHAChapter 61AEC/B/SAP/F-14, Issue Date: 01.04.2018	Qualtitaive No changes in pH
     	†	Flat Sour Organisms	APHAChapter 25, AEC/B/SAP/F-16, Issue Date: 01.04.2018	≥ 10 CFU/g or   ≥ 1 CFU /ml
     	†       	Yeast and Spores	AOACMethod no. 945.96, AEC/B/SAP/F-15, Issue Date: 01.04.2018	≥1 per 1/60 c.m.m.
         		Moulds	AEC/B/SAP/F-17, Issue no.: 04,Issue date: 01.04.2018 Visual Method	Present/Absent
     		E.coli O <sub>157</sub> and Vero or Shiga Toxin producing E.coli	IS 14397	Present/Absent/ 25 g
5.	Vegetable &	Total Viable Count/Total	IS 5402	≥ 10 CFU/g or

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	Vegetable	Plate Count/Total		>1 CFU/ml
 	Products	Bacterial Count/Standard plate Count/ Aerobic Microbial Count/Aerobic bacterial Count /Aerobic Plate Count / Heterotrophic Plate Count	US FDA BAM Chapter 3	≥ 10 CFU/g or ≥1 CFU/ml
   		Total Coliforms/ Coliform Count/ Coliform Bacteria	IS 5401 (Part 1)/ ISO 4832	≥ 10 CFU /g or ≥ 1 CFU/ml
     	   		IS 5401 (Part 1)/ ISO 4832	Presence/Absence/100 ml
   	 		IS 5401 (Part 2)/ ISO 4831	<0.3 to 1.1x10 <sup>6</sup> MPN index /g or ml
   	T		US FDA BAM Chapter 4	≥ 10 CFU/ g or ≥ 1 CFU/ml
				<3 to 1.1x10 <sup>6</sup> MPN index /g or ml
	 	Yeast and Mould Count/Mould Count	IS 5403	≥ 10 CFU/g or ≥ 1 CFU/ml
   			US FDA BAMChapter 18	≥ 10 CFU/g or ≥ 1 CFU/ml
		Escherichia coli (Thermotolerant bacteria)	IS 5887(Part I)	Qualitative (Present or Absent / 25g or 25ml Present or Absent / 1g or 1ml)
     		Escherichia coli	IS 5887(Part I)	≥10CFU /g or ≥ 1 CFU / ml 0.3 to 1.1x10 <sup>6</sup> MPN index /g or ml
       	 		US FDA BAMChapter 4	<3 to 1.1x10 <sup>6</sup> MPN index /g or ml
	†	Clostridium perfringens	IS 5887 (Part 4)	Qualitative

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
   			US FDA BAMChapter 16	(Present or Absent / 25 g or 25ml)
   !	 	Clostridium perfringens	IS 5887 (Part 4) US FDA BAMChapter 16	≥ 10 CFU/g or   ≥ 1 CFU/ml
         		Sulfite reducing bacteria growing under anaerobic conditions/Sulphite reducing Clostridia	ISO 15213	≥ 10 CFU/g or   ≥ 1 CFU/ml
         		FaecalStreptococci (Enterococci)	IS 5887 (Part II)	Qualitative (Present or Absent / 25 g or 25 ml)
   	 	Faecal Streptococci	IS 5887 (Part II)	≥ 10 CFU/g or ≥ 1CFU/ml
		Shigellaspp.	IS 5887(Part 7) US FDA BAM Chapter 6	Qualitative (Present or Absent / 25 g or 25ml)
   		Pseudomonas aeruginosa	IS 14843/ ISO 13720	≥ 10 CFU/g or ≥ 1 CFU/ml
       		Salmonella spp.	IS 5887(Part 3), US FDA BAMChapter 6, ISO 6579	Qualitative (Present or Absent / 25 g or 25 ml)
   	   	Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II)	Present or Absent/25 g or 25 ml
       		Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II) IS 5887(Part 8/Sec 1), ISO 6888 -1 US FDA BAM Chapter 12	≥ 10 CFU /g or ≥ 1 CFU /ml
		Vibrio cholerae	IS 5887(Part V), US FDA BAM Chapter 9	Qualitative (Present or Absent /25 g or 25 ml)
		Vibrio parahaemolyticus	IS 5887 (Part V) US FDA BAM Chapter 9	Qualitative (Present or Absent/ 25 g or 25 ml)
		Enterobacteriaceae	IS/ISO 7402	≥ 10 CFU /g or

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
           			ISO 21528-1 ISO 21528-2	> 1 CFU/ml Present or Absent/ 25 g or 25 ml > 10 CFU /g or > 1 CFU/ml
   	   	Listeria monocytogenes	US FDA BAMChapter 10 IS 14988(Part 1)	Present or Absent / 25 g or 25 ml
   	 	Bacillus cereus	IS 5887(Part 6) ISO 7932	≥ 10 CFU/g or ≥ 1 CFU / ml
		Incubation at 37°C for 10 days and 55°C for 7 days	Compendium of methods for the microbiological examination of foods, APHAChapter 61,Method 61.41,AEC/B/SAP/F-14, Issue Date: 01.04.2018	No changes in pH
		Flat Sour Organisms	Compendium of methods for the microbiological examination of foods, APHA 5 <sup>th</sup> Edition, Chapter 25, Method 25.61, AEC/B/SAP/F-16, Issue Date: 01.04.2018	≥ 10 CFU/g or ≥ 1 CFU /ml
         		Yeast and Spores	AOAC,20 <sup>th</sup> Edition, 2016, Method no. 945.96, AEC/B/SAP/F-15, Issue Date: 01.04.2018	≥1 per 1/60 c.m.m.
           	 	Moulds	AEC/B/SAP/F-17, Issue no.: 04,Issue date: 01.04.2018 Visual Method	Qualitative (Present/Absent)
		E.coli O <sub>157</sub> and Vero or Shiga Toxin producing E.coli	IS 14397	Qualitative (Present/Absent/ 25 g)
6.	Canned,	Total Viable Count/Total	 	≥ 10 CFU/g or

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
   	Processed and Frozen Foods	Plate Count/Total Bacterial Count/Standard	IS 5402	<u>≥</u> 1 CFU/ml
		plate Count/ Aerobic   Microbial Count/Aerobic   bacterial Count / Aerobic   Plate Count /   Heterotrophic Plate Count	US FDA BAM Chapter 3	≥ 10 CFU/g or ≥1 CFU/ml
   	†     	Total Coliforms/ Coliform Count/ Coliform Bacteria	IS 5401 (Part 1)/ ISO 4832	≥ 10 CFU /g or   ≥ 1 CFU/ml
	<del> </del>	   	IS 5401 (Part 2)/ ISO 4831	<0.3 to 1.1x10 <sup>6</sup> MPN index/g or ml
	       		US FDA BAM Chapter 4	≥ 10 CFU/ g or ≥1 CFU/ml <3 to 1.1x10 <sup>6</sup> MPN index/g or ml
   	<del> </del>   	Yeast and Mould Count/ Mould Count	IS 5403	> 10 CFU/g or > 1 CFU/ml
			US FDA BAM, 8 <sup>th</sup> Edition, Revision A,Chapter 18, April 2001	≥ 10 CFU/g or ≥ 1 CFU/ml
           		Escherichia coli (Thermotolerant bacteria)	IS 5887(Part I):1976, RA 2018	Qualitative (Present or Absent/25g or 25ml Present or Absent / 1g or1 ml)
   	   	Escherichia coli	IS 5887(Part I)	≥10CFU /g or   ≥ 1 CFU /ml
		 	 	0.3 to 1.1x10 <sup>6</sup> MPN index/g or ml
- <u>-</u> -			US FDA BAMChapter 4	<3 to 1.1x10 <sup>6</sup> MPN index/g or ml
<u></u>	<del> </del>	Clostridium perfringens	IS 5887 (Part 4)	Qualitative

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   		   	US FDA BAMChapter 16	(Present or Absent / 25 g or 25ml)
   	†	Clostridium perfringens	IS 5887 (Part 4) US FDA BAM Chapter 16	≥ 10 CFU/g or ≥ 1 CFU/ml
         		Sulfite reducing bacteria growing under anaerobic conditions/Sulphite reducing Clostridia	ISO 15213	≥ 10 CFU/g or ≥ 1 CFU/ml
	     	FaecalStreptococci (Enterococci)	IS 5887 (Part II)	Qualitative (Present or Absent / 25 g or 25 ml)
   		Faecal Streptococci	IS 5887 (Part II)	≥ 10 CFU/g or ≥ 1CFU/ml
   		Shigellaspp.	IS 5887(Part 7) US FDA BAMChapter 6	Present or Absent / 25 g or 25ml
   	   	Pseudomonas aeruginosa	IS 14843:2000, RA 2009 / ISO 13720:1995	≥ 10 CFU/g or ≥ 1 CFU/ml
               		Salmonella spp.	IS 5887(Part 3):1999, RA 2018 US FDA BAM,8 <sup>th</sup> Edition, Revision A,Chapter6,Jan 2001,Updated March 2018 ISO 6579:2017	Present or Absent / 25 g or 25 ml
   	<del> </del>	Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II):1976, RA 2018	Present or Absent/ 25 g or 25 ml
		Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II):1976, RA 2018 IS 5887(Part 8/Sec 1):2002, Amendment No.1,Jan 2010/ ISO 6888 -1 : 1999 US FDA BAM,8 <sup>th</sup> Edition, Revision A, Chapter 12,Jan 2001,Updated March 2016	≥ 10 CFU /g or ≥ 1 CFU /ml
	<del> </del>	Vibrio cholerae	IS 5887(Part V):1976,	Present or Absent /25 g

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			RA 2018 US FDA BAM, 8 <sup>th</sup> Edition, Revision A,Chapter 9,May 2004	or 25 ml
		Vibrio parahaemolyticus	IS 5887 (Part V) :1976, RA 2009 US FDA BAM, 8 <sup>th</sup> Edition,Revision A, Chapter 9, May 2004	Present or Absent/ 25 g or 25 ml
           		Enterobacteriaceae	IS/ISO 7402: 1993, RA 2018 ISO 21528-1:2017	> 10 CFU /g or > 1 CFU/ml Present or Absent/ 25 g or 25 ml
i   	 		ISO 21528-2:2017	≥ 10 CFU /g or ≥ 1 CFU/mI
         		Listeria monocytogenes	US FDA BAMChapter 10, IS 14988(Part:1)	Present or Absent / 25 g or 25 ml Present or Absent / 'x' g or 'x' ml
   	   	Bacillus cereus	IS 5887(Part 6) ISO 7932	≥ 10 CFU/g or   ≥ 1 CFU / ml
       		Incubation at 37°C for 10 days and 55°C for 7 days	APHAChapter 61AEC/B/SAP/F-14, Issue Date: 01.04.2018	No changes in pH
     		Flat Sour Organisms	APHA Chapter 25 AEC/B/SAP/F-16, Issue Date: 01.04.2018	≥ 10 CFU/g or ≥ 1 CFU /ml
		Yeast and Spores	AOAC Method no. 945.96, AEC/B/SAP/F-15, Issue Date: 01.04.2018	≥1 per 1 /60 c.m.m.
	<del>                                     </del>	Histamine	AEC/M/SAP/F-20, Issue	≥ 2.5 mg/kg

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	   		Date: 01.04.2018 (ELISA Method)	
         	 	Moulds 	AEC/B/SAP/F-17, Issue no.: 04,Issue date: 01.04.2018 Visual Method	Qualitative (Present/Absent)
         		E.coli O <sub>157</sub> and Vero or Shiga Toxin producing E.coli	IS 14397	Qualitative (Present or Absent / 25 g or 25 ml)
<b>7.</b>	Jams, Juices, Sauces and Concentrates	Total Viable Count/Total Plate Count/Total Bacterial Count/Standard	IS 5402	≥ 10 CFU/g or   ≥1 CFU/ml
 		plate Count/ Aerobic Microbial Count/Aerobic bacterial Count / Aerobic Plate Count / Heterotrophic Plate Count	US FDA BAM Chapter 3	≥ 10 CFU/g or ≥1 CFU/mI
	 	Total Coliforms/ Coliform Count/ Coliform Bacteria	IS 5401 (Part 1)/ ISO 4832	≥ 10 CFU /g or ≥ 1 CFU/ml
   		   	IS 5401 (Part 2)/ ISO 4831	<0.3 to 1.1x10 <sup>6</sup> MPN index/g or ml
       			US FDA BAMChapter 4	≥ 10 CFU/ g or ≥ 1 CFU/ml <3 to 1.1x10 <sup>6</sup> MPN index/g or ml
   	   	Yeast and Mould Count/Mould Count	IS 5403	≥ 10 CFU/g or > 1 CFU/ml
   	   	1   	US FDA BAM Chapter 18	≥ 10 CFU/g or ≥ 1 CFU/ml
		Escherichia coli (Thermotolerant bacteria)	IS 5887(Part I)	Qualitative (Present or Absent / 25g or 25ml Present or Absent / 1g

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				or 1ml)
		Escherichia coli	IS 5887(Part I)	≥10CFU/g or
Ĺ		<u>i</u>		<u>&gt;</u> 1 CFU / ml
				0.3 to 1.1x10 <sup>6</sup> MPN
<u>L</u>	<u> </u>	<u> </u>		index/g or ml
		}	US FDA BAMChapter 4	<3 to 1.1x10 <sup>6</sup> MPN
<u></u>		<u>i</u>		index/g or ml
 		Clostridium perfringens	IS 5887 (Part 4)	Qualitative
į		į	US FDA BAMChapter 16	(Present or Absent / 25
L	<u> </u>	L	! <b>L</b>	g or 25ml)
		Clostridium perfringens	IS 5887 (Part 4)	≥ 10 CFU /g or
ļ !	İ		US FDA BAM Chapter 16	<u>≥</u> 1 CFU /ml
<u> </u>	<del> </del>	Sulfite reducing bacteria	ISO 15213	≥ 10 CFU /g or
	 	growing under anaerobic conditions/Sulphite	 	<u>&gt;</u> 1 CFU/ml
<u> </u>	<del> </del>	reducing Clostridia	 	
į		Faecal Streptococci	IS 5887 (Part II)	Qualitative
 		(Enterococci)	 	(Present or Absent / 25
<u> </u>	<del> </del>	Facal Strantages	IC 5007 (Day II)	g or 25 ml)
į I	i I	Faecal Streptococci	IS 5887 (Part II)	≥ 10 CFU/g or > 1CFU/ml
		Shigellaspp.	IS 5887(Part 7)	Qualitative
			US FDA BAMĆhapter 6	(Present or Absent / 25
1			' !	g or 25ml)
ļ	<del> </del>	Pseudomonas aeruginosa	IS 14843/	> 10 CFU/g or
		Ì	ISO 13720	≥ 1 CFU/ml
[	T	Salmonella spp.	IS 5887(Part 3)	Qualitative
			US FDA BAMChapter 6	(Present or Absent / 25
<u> </u> 	<u> </u>	<u> </u>	ISO 6579	g or 25 ml)
		Staphylococcus aureus	IS 5887 (Part II)	Qualitative
į		(Coagulase positive)		(Present or Absent/25 g
L	<u> </u>	<u> </u>	! L	or 25 ml)
L	<u> </u>	_Staphylococcus	IS 5887 (Part II)	≥ 10 CFU /g or

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     		aureus(Coagulase positive)	IS 5887(Part 8/Sec 1)/ ISO 6888 -1 US FDA BAM Chapter 12	≥ 1 CFU /ml
		Vibrio cholerae	IS 5887(Part V) US FDA BAM Chapter 9	Qualitative (Present or Absent /25 g or 25 ml)
		Vibrio parahaemolyticus	IS 5887 (Part V) US FDA BAM Chapter 9	Qualitative (Present or Absent/ 25 g or 25 ml)
   	<del> </del>   	Enterobacteriaceae	IS/ISO 7402	≥ 10 CFU /g or≥ 1 CFU/ml
     	 		ISO 21528-1	Present or Absent/ 25 g or 25 ml
	   		ISO 21528-2	≥ 10 CFU /g or ≥ 1 CFU/ml
		Listeria monocytogenes	US FDA BAMChapter 10 IS 14988(Part 1)	Qualitative (Present or Absent / 25 g or 25 ml)
   	   	Bacillus cereus	IS 5887(Part 6)/ ISO 7932	≥ 10 CFU/g or   ≥ 1 CFU /ml
		Flat Sour Organisms	APHA Chapter 25, Method 25.61 AEC/B/SAP/F-16, Issue Date: 01.04.2018	≥ 10 CFU/g or ≥ 1 CFU /ml
		Yeast and Spores	AOACMethod no. 945.96, AEC/B/SAP/F-15, Issue Date: 01.04.2018	≥1 per 1/60 c.m.m.
		Moulds	AEC/B/SAP/F-17, Issue	Qualitative

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			no.: 04,Issue date: 01.04.2018 Visual Method	(Present/Absent)
	 	E.coli O <sub>157</sub> and Vero or Shiga Toxin producing E.coli	IS 14397 	Qualitative (Present or Absent / 25 g or 25 ml)
8.	Nut and Nut Products	Total Viable Count/Total Plate Count/Total	IS 5402	≥ 10 CFU/g or   ≥1CFU/ml
		Bacterial Count/Standard   plate Count/ Aerobic   Microbial Count/Aerobic   bacterial Count /Aerobic   Plate Count /   Heterotrophic Plate Count	US FDA BAM Chapter 3	≥ 10 CFU/g or ≥1 CFU/ml
	 	Total Coliforms/ Coliform Count/ Coliform Bacteria	IS 5401 (Part 1)/ ISO 4832	≥ 10 CFU /g or   ≥ 1 CFU/ml
   	<del> </del>		IS 5401 (Part 2)/ ISO 4831	<0.3 to 1.1x10 <sup>6</sup> MPN index/g or ml
			US FDA BAMChapter 4,	≥ 10 CFU/ g or ≥ 1 CFU/ml <3 to 1.1x10 <sup>6</sup> MPN index/g or ml
   	   	Yeast and Mould Count	IS 5403	≥ 10 CFU/g or ≥ 1 CFU/ml
			US FDA BAMChapter 18	≥ 10 CFU/g or ≥ 1 CFU/ml
		Escherichia coli (Thermotolerant bacteria)	IS 5887(Part I)	Qualitative (Present or Absent / 25g or 25ml Present or Absent / 1g or 1ml)
	T	Escherichia coli	IS 5887(Part I)	≥10CFU /g or

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
ļ	T	Ţ		≥ 1 CFU / ml
ļ	<del> </del>	<u></u>		0.3 to 1.1x10 <sup>6</sup> MPN
				index/g or ml
	T		US FDA BAMChapter 4,	<3 to 1.1x10 <sup>6</sup> MPN
				index/g or ml
	 	Clostridium perfringens	IS 5887 (Part 4), US FDA BAMChapter 16	Qualitative (Present or Absent / 25 g or 25ml)
	<del> </del>	Clostridium perfringens	IS 5887 (Part 4) US FDA BAMChapter 16	<u>&gt;</u> 10 CFU /g or   > 1 CFU /ml
         	†         	Sulfite reducing bacteria growing under anaerobic conditions/Sulphite reducing Clostridia	ISO 15213	≥ 10 CFU /g or   ≥ 1 CFU/ml
     	†	FaecalStreptococci (Enterococci)	IS 5887 (Part II)	Qualitative (Present or Absent / 25 g or 25 ml)
	<del>                                     </del>	Faecal Streptococci	IS 5887 (Part II)	≥ 10 CFU/g or > 1CFU /ml
	     	Shigellaspp.	IS 5887(Part 7) US FDABAMChapter 6	Qualitative (Present or Absent / 25 g or 25ml)
   	<del> </del>	Pseudomonas aeruginosa	IS 14843/ ISO 13720	≥ 10 CFU/g or ≥ 1 CFU /ml
	     	Salmonella spp.	IS 5887(Part 3) US FDA BAMChapter 6, ISO 6579	Qualitative (Present or Absent / 25 g or 25 ml)
	 	Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II)	Qualitative (Present or Absent/25 g or 25 ml)
       		Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II) IS 5887(Part 8/Sec 1)/ ISO 6888 -1 US FDA BAMChapter 12	≥ 10 CFU /g or ≥ 1 CFU /ml

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		Vibrio cholerae	IS 5887(Part V) US FDA BAMChapter 9	Qualitative (Present or Absent /25 g or 25 ml)
   	 	Vibrio parahaemolyticus	IS 5887 (Part V) US FDA BAMChapter 9	Present or Absent/ 25 g or 25 ml
   	   	Enterobacteriaceae	IS/ISO 7402	> 10 CFU /g or > 1 CFU/ml
   	<del> </del>   	Listeria monocytogenes	US FDA BAMChapter 10, IS 14988(Part 1)	Present or Absent / 25 g or 25 ml
   	     	Bacillus cereus	IS 5887(Part 6) ISO 7932	≥ 10 CFU/g or ≥ 1 CFU / ml
         		Total Aflatoxins	FSSAI Manual 2016,Clause No.8 Page No.25 ELISA Method, SOP No.AEC/B/SAP/F-13	≥1.7 µg/kg
		Moulds	IS 1907 AEC/B/SAP/F-18 Issue no.: 04, Issue date: 01.04.2018 (Visual Method)	Qualitative Present/Absent
<b>9.</b>	Cereals and Cereal Products, Pulses and Pulse Products	Total Viable Count/Total Plate Count/Total Bacterial Count/Standard plate Count/ Aerobic	IS 5402	≥ 10 CFU/g
		Microbial Count/Aerobic bacterial Count /Aerobic Plate Count / Heterotrophic Plate Count	US FDA BAM Chapter 3	≥ 10 CFU/g
   	 	Total Coliforms/ Coliform Count/ Coliform Bacteria	IS 5401 (Part 1)/ ISO 4832	≥ 10 CFU /g
	     		IS 5401 (Part 2)/ ISO 4831	<0.3 to 1.1x10 <sup>6</sup> MPN index/g
		<u> </u>	US FDA BAMChapter 4	≥ 10 CFU / g

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F				<3 to 1.1x10 <sup>6</sup> MPN
	 		 	index/g
		Yeast and Mould Count	IS 5403	≥ 10 CFU/g
	<del> </del>		US FDA BAM Chapter 18	≥ 10 CFU/g
	<del> </del>	Escherichia coli	IS 5887(Part I)	Present or Absent / 25g
İ	 	(Thermotolerant bacteria)		Present or Absent / 1g
F		Escherichia coli	IS 5887(Part I)	≥ 10 CFU /g
				0.3 to 1.1x10 <sup>6</sup> MPN
				index/g
	 		US FDA BAM Chapter 4	<3 to 1.1x10 <sup>6</sup> MPN
Ĺ	<u> </u>	<u>i</u>	<u> </u>	index/g
		Clostridium perfringens	IS 5887 (Part 4)	Qualitative
<u></u> _	<u> </u>	<u>i</u>	US FDA BAM Chapter 16	Present or Absent / 25g
	 	Clostridium perfringens	IS5887 (Part 4)	<u>&gt;</u> 10 CFU /g
<u>L</u>	<u> </u>	<u>i</u>	US FDA BAMChapter 16	
       		Sulfite reducing bacteria growing under anaerobic conditions/Sulphite reducing Clostridia	ISO 15213	<u>&gt;</u> 10 CFU /g
<u> </u>		FaecalStreptococci	IS 5887 (Part II)	Qualitative
Ĺ	<u> </u>	(Enterococci)	<u> </u>	(Present or Absent/25g)
		Faecal Streptococci	IS 5887 (Part II)	≥ 10 CFU/g
	 	Pseudomonas aeruginosa	IS 14843/ ISO 13720	≥ 10 CFU/g
F		Salmonella spp.	IS 5887(Part 3)	Qualitative
			US FDA BAMChapter 6	Present or Absent / 25 g
 	 	<u> </u>	ISO 6579	or 25 ml
		Shigella spp.	IS 5887(Part 7)	Qualitative
<u></u>	<u> </u>	<u> </u>	US FDA BAMChapter 6	(Present or Absent/25g)
 	 	Staphylococcus aureus	IS 5887 (Part II )	Qualitative
	;   	(Coagulase positive)	  -	(Present or Absent /25g)
	<del> </del>	Staphylococcus	IS 5887 (Part II)	

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		aureus(Coagulase positive)	IS 5887(Part 8/Sec 1)/ ISO 6888 -1, US FDA BAMChapter 12	≥ 10 CFU /g
	<del> </del>   	Vibrio cholerae	IS 5887(Part V) US FDA BAM Chapter 9	Qualitative Present or Absent/ 25g
     	     	Vibrio parahaemolyticus	IS 5887 (Part V) US FDA BAMChapter 9	Qualitative Present or Absent/ 25g
	<del> </del>   	Enterobacteriaceae	IS/ISO 7402: 1993, RA 2018	≥ 10 CFU /g or ≥ 1 CFU/ml
		Listeria monocytogenes	US FDA BAM Chapter 10 IS 14988(Part 1)	Present or Absent / 25 g
	 	Bacillus cereus	IS 5887(Part 6), ISO 7932	≥ 10 CFU/g
         		Total Aflatoxin	FSSAI Manual, Clause No.8 Page No.25ELISA Method, SOP No.AEC/B/SAP/F-13	≥1.7 µg/kg
         		Presence of moulds	AEC/M/SAP/F-18 Issue no.: 04, Issue date: 01.04.2018 (Visual Method)	Qualitative Present /Absent
     	       	Deoxynivalenol (DON)	AOACMethod No. 2012.01 ELISA Method SOP No.AEC/B/SAP/F-21	≥200 µg/kg
10.	Bakery Products	Total Viable Count/Total Plate Count/Total Bacterial Count/Standard plate Count/ Aerobic Microbial Count/Aerobic bacterial Count / Aerobic Plate Count / Heterotrophic Plate Count	IS 5402 US FDA BAM Chapter 3	≥ 10 CFU/g ≥ 10 CFU/g

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	<del> </del>	Total Coliforms/ Coliform Count/ Coliform Bacteria	IS 5401 (Part 1)/ ISO 4832	≥ 10 CFU /g
			IS 5401 (Part 2)/ ISO 4831	<0.3 to 1.1x10 <sup>6</sup> MPN index/g
	 	 	US FDA BAMChapter 4	> 10 CFU / g <3 to 1.1x10 <sup>6</sup> MPN index/g
	   	Yeast and Mould Count	IS 5403 US FDA BAM Chapter 18	≥ 10 CFU/g ≥ 10 CFU/g
		Escherichia coli (Thermotolerant bacteria)	IS 5887(Part I)	Present or Absent / 25g Present or Absent /1g
	     	Escherichia coli	IS 5887(Part I)	<u>&gt;</u> 10 CFU /g 0.3 to 1.1x10 <sup>6</sup> MPN index/g
	 		US FDA BAMChapter 4	<3 to 1.1x10 <sup>6</sup> MPN index/g
		Clostridium perfringens	IS 5887 (Part 4), US FDA BAMChapter 16	Qualitative Present or Absent / 25 g
	   	Clostridium perfringens	IS 5887 (Part 4) US FDA BAM Chapter 16	≥ 10 CFU /g
		Sulfite reducing bacteria growing under anaerobic conditions/Sulphite reducing Clostridia	ISO 15213	≥ 10 CFU /g
		Faecal <i>Streptococci</i> (Enterococci)	IS 5887 (Part II)	Present or Absent / 25 g Present or Absent / 0.1 g
	 	FaecalStreptococci Pseudomonas aeruginosa	IS 5887 (Part II) IS 14843 / ISO 13720	<u>&gt;</u> 10 CFU/g ≥ 10 CFU/g

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Salmonella spp.	IS 5887(Part 3) US FDA BAMChapter 6, ISO 6579	Qualitative Present or Absent / 25g
	 	Shigella spp.	IS 5887(Part 7 ) US FDA BAM Chapter 6	Qualitative Present or Absent / 25g
	     	Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II )	Qualitative Present or Absent /25g
		Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II) IS 5887(Part 8/Sec 1)/ ISO 6888 -1 US FDA BAMChapter 12	≥ 10 CFU /g
 	<del> </del>	Vibrio cholerae	IS 5887(Part V) US FDA BAMChapter 9,	Present or Absent/ 25g
		Vibrio parahaemolyticus	IS 5887 (Part V) US FDA BAMChapter 9	Present or Absent/ 25g
	   	Enterobacteriaceae	IS/ISO 7402:1993	≥ 10 CFU /g or ≥ 1 CFU/ml
		Listeria monocytogenes	US FDA BAM Chapter 10, IS 14988(Part 1):2001	Present or Absent / 25 g
	<del> </del>   	Bacillus cereus	IS 5887(Part 6) ISO 7932:2004	≥ 10 CFU/g
11.	Starch and Starch Products	Total Viable Count/Total Plate Count/Total	IS 5402:2012	<u>≥</u> 10 CFU/g
		Bacterial Count/Standard plate Count/ Aerobic Microbial Count/Aerobic bacterial Count /Aerobic Plate Count / Heterotrophic Plate Count	US FDA BAMChapter 3	≥ 10 CFU/g
	     	Total Coliforms/ Coliform Count/ Coliform Bacteria	IS 5401 (Part 1):2002/ ISO 4832:1991	≥ 10 CFU /g
	<del> </del>	<u> </u>	IS 5401 (Part 2) /	<0.3 to 1.1x10 <sup>6</sup> MPN

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
F	T	Ţ	ISO 4831	index/g
<u></u>	<del> </del>	<u></u>	US FDA BAMChapter 4	≥ 10 CFU / g
<u> </u>	<u> </u>		1	<3 to 1.1x10 <sup>6</sup> MPN
İ				index/g
<u> </u>	<u> </u>	Yeast and Mould Count	IS 5403	≥ 10 CFU/g
 	   		US FDA BAM Chapter 18	≥ 10 CFU/g
<u> </u>	 	Escherichia coli	IS 5887(Part I)	Qualitative
į		(Thermotolerant bacteria)		Present or Absent / 25g
 	 <del> </del>	 	 	Present or Absent / 1g
 	 <del> </del>	Escherichia coli	IS 5887(Part I)	<u>&gt;</u> 10 CFU /g
] 	 	 	 	0.3 to 1.1x10 <sup>6</sup> MPN
L	 <del> </del>	<u></u>	 <del> </del>	index/g
	 		US FDA BAM Chapter 4	<3 to 1.1x10 <sup>6</sup> MPN
<u> </u>	 <del> </del>		 	index/g
<u> </u> 	 	Clostridium perfringens	IS 5887 (Part 4) US FDA BAMChapter 16	Present or Absent / 25 g
	 	Clostridium perfringens	IS5887 (Part 4)	≥ 10 CFU /g
<u>L</u>	<u> </u>	<u> </u>	US FDA BAMChapter 16	
         		Sulfite reducing bacteria growing under anaerobic conditions/Sulphite reducing Clostridia	ISO 15213	<u>&gt;</u> 10 CFU /g
		Faecal Streptococci	IS 5887 (Part II)	Qualitative
į		(Enterococci)		Present or Absent / 25 g
L	<u> </u>	<u> </u>	 	Present or Absent / 0.1 g
<u></u>	 L	FaecalStreptococci	IS 5887 (Part II)	<u>&gt;</u> 10 CFU/g
 	 	Pseudomonas aeruginosa	IS 14843 / ISO 13720	<u>&gt;</u> 10 CFU/g
		Salmonella spp.	IS 5887(Part 3),	Qualitative
       	 	 	US FDA BAMChapter 6 ISO 6579	Present or Absent / 25g
	<del> </del>   	Shigella spp.	IS 5887(Part 7 )	Present or Absent / 25g

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			US FDA BAMChapter 6	
		Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II )	Qualitative Present or Absent /25g
		Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II), IS 5887(Part 8/Sec 1) / ISO 6888 -1 US FDA BAMChapter 12	≥ 10 CFU /g
	 	Vibrio cholerae	IS 5887(Part V), US FDA BAMChapter 9	Qualitative Present or Absent/ 25g
	     	Vibrio parahaemolyticus	IS 5887 (Part V) US FDA BAMChapter 9	Qualitative Present or Absent/ 25g
	<del> </del>   	Enterobacteriaceae	IS/ISO 7402: 1993, RA 2009	≥ 10 CFU /g or > 1 CFU/ml
		Listeria monocytogenes	US FDA BAM,8 <sup>th</sup> Edition, Revision A, Chapter 10, Updated March 2017 IS 14988 (Part 1):2001	Qualitative Present or Absent / 25 g
	<del>                                     </del>	Bacillus cereus	IS 5887(Part 6):2012, ISO 7932:2004	<u>≥</u> 10 CFU/g
12.	Meat and Meat Products	Total Viable Count/Total Plate Count/Total Bacterial Count/Standard plate Count/ Aerobic	IS 5402:2012	≥ 10 CFU/g
		Microbial Count/Aerobic   bacterial Count /Aerobic   Plate Count /   Heterotrophic Plate Count	US FDA BAM Chapter 3	≥ 10 CFU/g
	<del> </del>   	Total Coliforms/ Coliform Count/ Coliform Bacteria	IS 5401 (Part 1)/ ISO 4832	≥ 10 CFU /g
	<del> </del>		IS 5401 (Part 2)/ ISO 4831	<0.3 to 1.1x10 <sup>6</sup> MPN index/g
			US FDA BAMChapter 4,	<u>&gt;</u> 10 CFU / g

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	 	ļ		<3 to 1.1x10 <sup>6</sup> MPN
	<u> </u>	 	 <del> </del>	index/g
	<u> </u>	Yeast and Mould Count	IS 5403	<u>&gt;</u> 10 CFU/g
	 <b> </b>	 	US FDA BAMChapter 18	<u>&gt;</u> 10 CFU/g
		Escherichia coli	IS 5887(Part I)	Qualitative
	 	(Thermotolerant bacteria)	 	Present or Absent / 25g Present or Absent / 1 g
	T	Escherichia coli	IS 5887(Part I)	≥ 10 CFU /g
	†		†	0.3 to 1.1x10 <sup>6</sup> MPN index/g
	   		US FDA BAM Chapter 4	<3 to 1.1x10 <sup>6</sup> MPN index/g
	<u> </u>	Clostridium perfringens	IS 5887 (Part 4)	Qualitative
	 	, ,	US FDA BAMChapter 16	Present or Absent / 25 g
	   	Clostridium perfringens	IS5887 (Part 4) US FDA BAMChapter 16,	<u>≥</u> 10 CFU /g
	         	Sulfite reducing bacteria growing under anaerobic conditions/Sulphite reducing Clostridia	ISO 15213	≥ 10 CFU /g
	     	FaecalStreptococci (Enterococci)	IS 5887 (Part II):1976, RA 2018	Qualitative Present or Absent / 25g
	†   	FaecalStreptococci (Enterococci)	IS 5887 (Part II):1976, RA 2018	≥ 10 CFU/g
	   	Pseudomonas aeruginosa	IS 14843:2000, RA 2009 / ISO 13720:1995	≥ 10 CFU/g
		Salmonella spp.	IS 5887(Part 3) :1999, RA 2018 US FDA BAM,8 <sup>th</sup> Edition, Revision A, Chapter 6, Jan 2001,Updated March 2018 ISO 6579:2017	Qualitative Present or Absent / 25g
		Shigella spp.	IS 5887(Part 7)	Qualitative

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ļ			US FDA BAMChapter 6	Present or Absent / 25g
<u> </u>	<del> </del>	Staphylococcus aureus	IS 5887 (Part II)	Qualitative
 	 	(Coagulase positive)	, ,	Present or Absent / 25 g
		Staphylococcus aureus	IS 5887 (Part II)	<u>-</u> -
       	 	(Coagulase positive)	S 5887(Part 8/Sec 1)/ SO 6888 -1 US FDA BAMChapter 12	≥ 10 CFU /g
   		Vibrio cholerae	IS 5887(Part V) US FDA BAMChapter 9	Qualitative Present or Absent / 25 g
		Vibrio parahaemolyticus	IS 5887 (Part V)	Qualitative
<u> </u>	<u> </u>	<u> </u>	US FDA BAMChapter 9	Present or Absent / 25 g
   	 	Enterobacteriaceae	IS/ISO 7402	≥ 10 CFU /g or > 1 CFU/mI
 		Listeria monocytogenes	US FDA BAM Chapter 10 IS 14988(Part 1)	Qualitative Present or Absent / 25 g
     	<del> </del>   	Bacillus cereus	IS 5887(Part 6) ISO 7932	≥ 10 CFU/g
ļ		<i>Campylobacter</i> spp	ISO 10272-1	Qualitative
     			Detection Procedure B	Present/Absent/ g Present/Absent/10 g
13.	Poultry and	Total Viable Count/Total	IS 5402	> 10 CFU/g
-                     	Poultry Products	Plate Count/Total Bacterial Count/Standard plate Count/ Aerobic Microbial Count/Aerobic bacterial Count /Aerobic Plate Count / Heterotrophic Plate Count	US FDA BAMChapter 3, Jan 2001	≥ 10 CFU/g
	 	Total Coliforms/ Coliform	IS 5401 (Part 1)/	<u>&gt;</u> 10 CFU /g

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F	T	Count/ Coliform Bacteria	ISO 4832	
<u></u>	<del> </del>	<u></u>	IS 5401 (Part 2)/	<0.3 to 1.1x10 <sup>6</sup> MPN
į			ISO 4831	index/g
			US FDA BAMChapter 4	≥ 10 CFU / g
	 			<3 to 1.1x10 <sup>6</sup> MPN
<u>L</u>	<u> </u>	<u>i</u>	<u> </u>	index/g
		Yeast and Mould Count	IS 5403	≥ 10 CFU/g
	 	 	US FDA BAM Chapter 18	≥ 10 CFU/g
	<del> </del>	Escherichia coli	IS 5887(Part I)	Qualitative
į		(Thermotolerant bacteria)		Present or Absent / 25g
L	 	 	 	Present or Absent / 1 g
L	 	Escherichia coli	IS 5887(Part I)	<u>&gt;</u> 10 CFU /g
	 	 		0.3 to 1.1x10 <sup>6</sup> MPN
<u>i</u>	<u> </u>	<u> </u>		index/g
	 	! 	US FDA BAMChapter 4,	<3 to 1.1x10 <sup>6</sup> MPN
L	<u> </u>	 	 <del> </del>	index/g
	 	Clostridium perfringens	IS 5887 (Part 4)	Qualitative
L	 <del> </del>		US FDA BAM Chapter 16	Present or Absent/ 25g
		Clostridium perfringens	IS5887 (Part 4) US FDA BAM Chapter 16	≥ 10 CFU /g
		Sulfite reducing bacteria growing under anaerobic conditions/Sulphite reducing Clostridia	ISO 15213	≥ 10 CFU /g
	 	Faecal <i>Streptococci</i>	IS 5887 (Part II)	Qualitative
<u></u>	<u> </u>	(Enterococci)	i 	Present or Absent / 25g
 	 <del> </del>	Faecal Streptococci	IS 5887 (Part II)	<u>&gt;</u> 10 CFU/g
<u> </u>	 <del> </del>	Pseudomonas aeruginosa	IS 14843/ ISO 13720	<u>&gt;</u> 10 CFU/g
	 	Salmonella spp.	IS 5887(Part 3),	Qualitative
   	 	 	US FDA BAM Chapter 6 ISO 6579	Present or Absent / 25g
	 	Shigella spp.	IS 5887(Part 7)	Qualitative

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 	<u> </u>		US FDA BAMChapter 6	Present or Absent / 25g
	† 	Staphylococcus aureus	IS 5887 (Part II)	Qualitative
ļ ———-	<u> </u>	(Coagulase positive)	<u> </u>	Present or Absent / 25 g
     		Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II): IS 5887(Part 8/Sec 1)/ ISO 6888 -1	≥ 10 CFU /g
       			US FDA BAMChapter 12	
   		Vibrio cholerae	IS 5887(Part V) US FDA BAM Chapter 9	Qualitative Present or Absent / 25 g
 		Vibrio parahaemolyticus	IS 5887 (Part V) :1976,	Qualitative
 	 		RA 2018	Present or Absent / 25 g
į		į	US FDA BAM, 8 <sup>th</sup> Edition,	
   	 	 	Revision A, Chapter 9, May 2004	
   	<del> </del>   	Enterobacteriaceae	IS/ISO 7402	≥ 10 CFU /g or ≥ 1 CFU/ml
   	 	Listeria monocytogenes	US FDA BAMChapter 10, IS 14988 (Part 1)	Present or Absent / 25 g
 		Bacillus cereus	IS 5887(Part 6), ISO 7932	≥10 CFU/g
14.	Fish and Fish	Total Viable Count/Total	IS 5402	<u>&gt;</u> 10 CFU/g
 	Products, Sea   Foods	Plate Count/Total Bacterial Count/Standard plate Count/ Aerobic Microbial Count/Aerobic	US FDA BAMChapter 3	<u>&gt;</u> 10 CFU/g
   	 	bacterial Count /Aerobic Plate Count /		
į		Heterotrophic Plate Count		
     	<del> </del>	Total Coliforms/ Coliform Count/ Coliform Bacteria	IS 5401 (Part 1) / ISO 4832	≥ 10 CFU /g
<u> </u>	<del> </del>	<b>+ L</b>	IS 5401 (Part 2)/	<0.3 to 1.1x10 <sup>6</sup> MPN

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	 		ISO 4831	index/g
 	<del>                                     </del>		US FDA BAMChapter 4	> 10 CFU/g <3 to 1.1x10 <sup>6</sup> MPN index/g
ļ	<del> </del>	Yeast and Mould Count	IS 5403 US FDA BAMChapter 18	> 10 CFU/g > 10 CFU/g
     	     	Escherichia coli (Thermotolerant bacteria)	IS 5887(Part I)	Qualitative Present or Absent / 25g Present or Absent /1g
 		Escherichia coli	IS 5887(Part I)	≥ 10 CFU/g 0.3 to 1.1x10 <sup>6</sup> MPN index/g
   			US FDA BAMChapter 4	<3 to 1.1x10 <sup>6</sup> MPN index/g
   		Clostridium perfringens	IS 5887 (Part 4) US FDA BAM Chapter 16	Qualitative Present or Absent / 25 g
   	   	Clostridium perfringens	IS 5887 (Part 4) US FDA BAM Chapter 16,	≥ 10 CFU/g
		Sulfite reducing bacteria growing under anaerobic conditions/Sulphite reducing Clostridia	ISO 15213	≥ 10 CFU/g
   	   	Faecal <i>Streptococci</i> (Enterococci)	IS 5887 (Part II)	Qualitative Present or Absent/ 25 g
	<del> </del>	FaecalStreptococci Pseudomonas aeruginosa	IS 5887 (Part II) IS 14843:2000/ ISO 13720	≥ 10 CFU/g ≥ 10 CFU/g
		Salmonella spp.	IS 5887(Part 3) US FDA BAMChapter 6, ISO 6579	Qualitative Present or Absent/25g
	<del> </del>	Shigella spp.	IS 5887(Part 7),	

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	   	Stanbula assaula auraua	RA 2018 US FDA BAMChapter 6	Qualitative Present or Absent /25g Qualitative
	 	Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II)	Qualitative   Present or Absent / 25 g
		Staphylococcus aureus(Coagulase positive)	IS 5887 (Part II) IS 5887(Part 8/Sec 1)/ ISO 6888 -1, US FDA BAM Chapter 12	≥ 10 CFU /g
   	<del> </del>	Vibrio cholerae	IS 5887(Part V) US FDA BAMChapter 9	Qualitative Present or Absent / 25 g
   	   	Vibrio parahaemolyticus	IS 5887 (Part V) US FDA BAM Chapter 9	Qualitative Present or Absent /25 g
	 	Enterobacteriaceae	IS/ISO 7402:	≥ 10 CFU /g or ≥ 1 CFU/ml
		Listeria monocytogenes	US FDA BAMChapter 10, IS 14988 (Part 1)	Qualitative Present or Absent / 25 g
   	<del> </del>   	Bacillus cereus	IS 5887(Part 6) ISO 7932	≥ 10 CFU/g
		Histamine	ELISA Method, SOP No.AEC/B/SAP/F-20 Issue no.: 04, Issue date: 01.04.2018	≥ 2.5 mg/kg
15.	Sweets and Confectionery Products( including Ice Lollies or Edible Ices and Ice candy)	Total Viable Count/Total Plate Count/Total Bacterial Count/Standard plate Count/ Aerobic Microbial Count/Aerobic bacterial Count / Aerobic Plate Count / Heterotrophic Plate Count	IS 5402 US FDA BAM Chapter 3	≥ 10 CFU /g   ≥ 10 CFU /g
 	<del> </del>	Total Coliforms/ Coliform	IS 5401 (Part 1)	≥ 10 CFU /g

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
F	T	Count/ Coliform Bacteria	/ISO 4832	
F	<del> </del>	<u> </u>	IS 5401 (Part 2)/	<0.3 to 1.1x10 <sup>6</sup> MPN
			ISO 4831	index/g
	T	<u></u>	US FDA BAMChapter 4	≥ 10 CFU / g
İ				3 to 1.1x10 <sup>6</sup> MPN
1			 	index/g
	T	Yeast and Mould Count	IS 5403	≥ 10CFU /g
			US FDA BAM Chapter 18	≥ 10 CFU /g
		Escherichia coli	IS 5887(Part I):1976,	Qualitative
1		(Thermotolerant bacteria)	RA 2018	Present or Absent / 25g
L	 	<u> </u>	 	Present or Absent / 1g
<u> </u>	 	Escherichia coli	S 5887(Part I):1976,	<u>&gt;</u> 10 CFU /g
		 	RA 2018	0.3 to 1.1x10 <sup>6</sup> MPN
<u>L</u>	<u> </u>	<u> </u>		index/g index /g
1			US FDA BAM , 8 <sup>th</sup> Edition,	<3 to 1.1x10 <sup>6</sup> MPN
<u> </u>	<u> </u>	<u> </u>	Revision A, Chapter 4	index/g
1	 	Clostridium perfringens	IS 5887 (Part 4)	Qualitative
	 	 	US FDA BAM Revision A, Chapter 16	Present or Absent / 25 g
   		Clostridium perfringens	IS 5887 (Part 4) US FDA BAMChapter 16	≥ 10 CFU /g
		Sulfite reducing bacteria growing under anaerobic conditions/Sulphite reducing Clostridia	ISO 15213: 2003	≥ 10 CFU /g
		Faecal <i>Streptococci</i> (Enterococci)	IS 5887 (Part II):1976, RA 2018	Qualitative Present or Absent / 25
 	<del> </del>   	Faecal Streptococci	IS 5887 (Part II):1976, RA 2018	<u>&gt;</u> 10 CFU /g
	   	Pseudomonas aeruginosa	IS 14843:2000, RA 2009/ ISO 13720:1995	≥ 10 CFU /g
L	 L	Salmonella spp.	IS 5887(Part 3)	Qualitative

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	   	   	US FDA BAMChapter 6 ISO 6579	Present or Absent / 25 g
		Shigella spp.	IS 5887(Part 7) US FDA BAM Chapter 6	Qualitative Present or Absent / 25 g
		Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II)	Qualitative Present or Absent / 25 g
		Staphylococcus aureus(Coagulase positive)	IS 5887 (Part II) IS 5887(Part 8/Sec 1) / ISO 6888 -1 US FDA BAMChapter 12	≥ 10 CFU/g
	   	Vibrio cholerae	IS 5887(Part V) US FDA BAMChapter 9	Qualitative Present or Absent / 25 g
	 	Vibrio parahaemolyticus	IS 5887 (Part V) US FDA BAM Chapter 9	Qualitative Present or Absent / 25 g
	 	Enterobacteriaceae	IS/ISO 7402	≥ 10 CFU /g or ≥ 1 CFU/ml
	 	Listeria monocytogenes	US FDA BAM Chapter 10 IS 14988 (Part 1)	Qualitative Present or Absent / 25 g
		Bacillus cereus	IS 5887(Part 6), ISO 7932	≥ 10 CFU/g
16.	Honey and Honey Products	Total Viable Count/Total Plate Count/Total Bacterial Count/Standard plate Count/ Aerobic Microbial Count/Aerobic bacterial Count / Aerobic Plate Count / Heterotrophic Plate Count	IS 5402, US FDA BAMChapter 3	≥ 10 CFU/g
	<del> </del>	Yeast &Mould Count	IS 5403	≥ 10 CFU/g
	<del> </del>	<del> </del>     	US FDA BAM Chapter 18	≥ 10 CFU/g
	<del> </del>	Total Coliforms/ Coliform	IS 5401 (Part 1)/	<u>≥</u> 10 CFU/g

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
ļ	<del> </del>	Count/ Coliform Bacteria	ISO 4832	
<u> </u>	<del> </del>	<u> </u>	IS 5401 (Part 2)/	<0.3 to 1.1x10 <sup>6</sup> MPN
			ISO 4831	index/g
	 		US FDA BAM Chapter 4	> 10 CFU/ g <3 to 1.1x10 <sup>6</sup> MPN index/g
	T	Escherichia coli	IS 5887(Part I)	Qualitative
	 	(Thermotolerant bacteria)		Present or Absent / 25g Present or Absent /1g
F	T	Escherichia coli	IS 5887(Part I)	≥ 10 CFU /g
   	   		1 	0.3 to 1.1x10 <sup>6</sup> MPN index/g
			US FDA BAMChapter 4	<3 to 1.1x10 <sup>6</sup> MPN index/g
	T	Clostridium perfringens	IS 5887 (Part 4)	Qualitative
			US FDA BAM Chapter 16	Present or Absent / 25 g
   	†   	Clostridium perfringens	IS 5887 (Part 4) US FDA BAM Chapter 16	≥ 10 CFU /g
		Sulfite reducing bacteria growing under anaerobic conditions/Sulphite reducing Clostridia	ISO 15213	≥ 10 CFU /g
	       	Faecal <i>Streptococci</i> (Enterococci)	IS 5887 (Part II)	Qualitative Present or Absent / 25
		Faecal Streptococci	IS 5887 (Part II)	≥ 10 CFU /g
		Pseudomonas aeruginosa	IS 14843/ ISO 13720	≥ 10 CFU /g
		Salmonella spp.	IS 5887(Part 3	Qualitative
i   	i !	 	US FDA BAMChapter 6	Present or Absent / 25 g
 	i !	 	ISO 6579	
		Shigellaspp.	IS 5887(Part 7)	Qualitative

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		T	US FDA BAM Chapter 6	Present or Absent / 25 g
		Staphylococcus aureus	IS 5887 (Part II)	Qualitative
		(Coagulase positive)		Present or Absent / 25 g
		Staphylococcus aureus	IS 5887 (Part II)	
		(Coagulase positive)	IS 5887(Part 8/Sec 1)/ ISO 6888 -1	≥ 10 CFU /g
	<u></u>		US FDA BAMChapter 12	
	 	Vibrio cholerae	│IS 5887(Part V) │US FDA BAMChapter 9	Present or Absent / 25 g
	 	Vibrio parahaemolyticus	IS 5887 (Part V) US FDA BAMChapter 9	Present or Absent / 25 g
	 	Enterobacteriaceae	IS/ISO 7402	≥ 10 CFU /g or ≥ 1 CFU/mI
		Listeria monocytogenes	US FDA BAM Chapter 10 IS 14988(Part 1)	Present or Absent / 25 g
	   	Bacillus cereus	IS 5887(Part 6) ISO 7932	≥ 10 CFU/g
17.	Sugar and Sugar Products	Aerobic Microbial Count/Total Viable	IS 5402 US FDA BAMChapter 3	≥ 10 CFU/g
	including Jaggery	Count/Total Plate Count/Total Bacterial Count/Standard plate Count/Aerobic bacterial Count /Aerobic Plate Count / Heterotrophic Plate Count		
		Yeast &Mould Count	IS 5403	≥ 10 CFU/g
			US FDA BAM Chapter 18	≥ 10 CFU/g
		Total Coliforms/ Coliform Count/ Coliform Bacteria	IS 5401 (Part 1) / ISO 4832	<u>≥ 10 CFU/g</u>
		 	IS 5401 (Part 2)/ ISO 4831	<0.3 to 1.1x10 <sup>6</sup> MPN index/g
			US FDA BAMChapter 4	≥ 10 CFU/ g

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	T	Ţ		<3 to 1.1x10 <sup>6</sup> MPN
<u></u>	<u>!</u>	<u> </u>	<u> </u>	index/g
 	l I	Escherichia coli	IS 5887(Part I)	Qualitative
į	ļ	(Thermotolerant bacteria)		Present or Absent / 25g
 	 	 	 	Present or Absent / 1g
 	 <b> </b>	Escherichia coli	IS 5887(Part I)	≥ 10 CFU /g
 	1	 	 	0.3 to 1.1x10 <sup>6</sup> MPN
	<u> </u>	<u></u>	 	index/g
	] 		US FDA BAMChapter 4	<3 to 1.1x10 <sup>6</sup> MPN
L	 <del> </del>	 	 	index/g
	]	Clostridium perfringens	IS 5887 (Part 4)	Qualitative
<u> </u>	<del> </del>	<u> </u>	US FDA BAM Chapter 16	Present or Absent / 25 g
	 	Clostridium perfringens	IS 5887 (Part 4) US FDA BAM Chapter 16	│ <u>&gt;</u> 10 CFU /g
		Sulfite reducing bacteria growing under anaerobic conditions/Sulphite reducing Clostridia	ISO 15213	≥ 10 CFU /g
	<del> </del>	Faecal Streptococci	IS 5887 (Part II)	Qualitative
		(Enterococci)	, ,	Present or Absent/ 25 g
	<del> </del>	Faecal Streptococci	IS 5887 (Part II)	≥ 10 CFU /g
	   	Pseudomonasaeruginosa	IS 14843/ ISO 13720	≥ 10 CFU /g
		Salmonella spp.	IS 5887(Part 3) US FDA BAM,Chapter 6 ISO 6579	Qualitative Present or Absent / 25 g
	† 	Shigellaspp.	IS 5887(Part 7)	Qualitative
<u></u>	<u> </u>	<u> </u>	US FDA BAMChapter 6	Present or Absent / 25 g
] 	 	Staphylococcus aureus	IS 5887 (Part II)	Qualitative
	<u> </u>	(Coagulase positive)	<u> </u>	Present or Absent / 25 g
	 	Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II) IS 5887(Part 8/Sec 1)/ ISO 6888 -1: US FDA BAM	   <u>&gt;</u> 10 CFU /g 

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	   	Vibrio cholerae	IS 5887(Part V) US FDA BAM Chapter 9	Qualitative Present or Absent / 25 g
	 	Vibrio parahaemolyticus	IS 5887 (Part V) US FDA BAMChapter 9	Qualitative Present or Absent / 25 g
		Enterobacteriaceae	IS/ISO 7402	≥ 10 CFU /g or ≥ 1 CFU/ml
		Listeria monocytogenes	US FDA BAM Chapter 10 IS 14988(Part1)	Qualitative Present or Absent / 25 g
	<del> </del>   	Bacillus cereus	IS 5887(Part 6) ISO 7932	≥ 10 CFU/g
18.	Herbs, Spices, Condiments and Related Products	Total Viable Count/Total Plate Count/Total Bacterial Count/Standard	IS 5402	≥ 10 CFU/g
		plate Count/ Aerobic Microbial Count/Aerobic bacterial Count / Aerobic Plate Count / Heterotrophic Plate Count	US FDA BAMChapter 3	≥ 10 CFU/g
		Total Coliforms/ Coliform Count/ Coliform Bacteria	IS 5401 (Part 1)/ ISO 4832	≥10 CFU /g
	   	   	IS 5401 (Part 2)/ ISO 4831	<0.3 to 1.1x10 <sup>6</sup> MPN index/g
			US FDA BAM Chapter 4	> 10 CFU/ g <3 to 1.1x10 <sup>6</sup> MPN index/g
		Yeast and Mould Count	IS 5403 US FDA BAMChapter 18	≥ 10CFU/g ≥ 10 CFU/g
		Escherichia coli (Thermotolerant bacteria)	IS 5887(Part I)	Qualitative Present or Absent / 25g Present or Absent /1g
	<u> </u>	Escherichia coli	IS 5887(Part I)	<u>≥</u> 10 CFU /g

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
   	   	   	1 	0.3 to 1.1x10 <sup>6</sup> MPN index/g
   			US FDA BAMChapter 4	<3 to 1.1x10 <sup>6</sup> MPN index/g
   		Clostridium perfringens	IS 5887 (Part 4) US FDA BAMChapter 16	Qualitative Present or Absent / 25 g
   		Clostridium perfringens	IS 5887 (Part 4) US FDA BAM Chapter 16	≥ 10 CFU /g
         		Sulfite reducing bacteria growing under anaerobic conditions/Sulphite reducing Clostridia	ISO 15213: 2003	≥ 10 CFU /g
   	   	Faecal Streptococci (Enterococci)	IS 5887 (Part II)	Qualitative Present or Absent / 25g
   	   	Faecal Streptococci	IS 5887 (Part II)	≥ 10 CFU/g
		Pseudomonas aeruginosa	IS 14843 / ISO 13720	≥ 10 CFU/g
         	 	Salmonella spp.	IS 5887(Part 3) US FDA BAMChapter 6, ISO 6579	Qualitative Present or Absent / 25g
   	<del> </del>	Shigella spp.	IS 5887(Part 7) US FDA BAMChapter 6	Qualitative Present or Absent / 25 g
		Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II)	Qualitative Present or Absent / 25 g
		Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II) IS 5887(Part 8/Sec 1)/ ISO 6888 -1 US FDA BAMChapter 12	≥10 CFU/g
     	     	Vibrio cholerae	IS 5887(Part V) US FDA BAMChapter 9	Qualitative Present or Absent / 25 g
	T	Vibrio parahaemolyticus	IS 5887(Part V)	Qualitative

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
F			US FDA BAMChapter 9	Present or Absent / 25 g
   	   	Enterobacteriaceae	IS/ISO 7402	≥ 10 CFU /g or ≥ 1 CFU/ml
   		Listeria monocytogenes	US FDA BAM Chapter 10, IS 14988 (Part 1)	Qualitative Present or Absent / 25 g
   		Bacillus cereus	IS 5887 (Part 6) ISO 7932	≥ 10 CFU/g
                   		Moulds	IS 1907, IS 3576, IS 2477, IS 3795, IS 1908, IS 3796, IS 3797, IS1798 AEC/B/SAP/F-18, Issue no.: 04, Issue date: 01.04.2018(Visual Method)	Present/Absent
19.	Edible Salts	Total Viable Count/Total	IS 5402	> 10 CFU/g
		Plate Count/Total Bacterial Count/Standard plate Count/ Aerobic Microbial Count/Aerobic bacterial Count /Aerobic Plate Count / Heterotrophic Plate Count	US FDA BAM Chapter 3	<u>&gt;</u> 10 CFU/g
   	 	Total Coliforms/ Coliform Count/ Coliform Bacteria	IS 5401 (Part 1)/ ISO 4832	≥10 CFU /g
	   		IS 5401 (Part 2) / ISO 4831	<0.3 to 1.1x10 <sup>6</sup> MPN index/g
     	     	 	US FDA BAMChapter 4	> 10 CFU/ g <3 to 1.1x10 <sup>6</sup> MPN index/g
		Yeast and Mould Count	IS 5403	≥ 10CFU/g
     	     	 	US FDA BAM Chapter 18	≥ 10 CFU/g
H	<del> </del>	Escherichia coli	IS 5887(Part I)	Present or Absent / 25g

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
F	T	(Thermotolerant bacteria)		Present or Absent /1g
	<u> </u>	Escherichia coli	IS 5887(Part I)	≥ 10 CFU /g
<u></u>	<del> </del>	<u></u>		0.3 to 1.1x10 <sup>6</sup> MPN
i	 			index/g
	   	 	US FDA BAMChapter 4	<3 to 1.1x10 <sup>6</sup> MPN index/g
				l lidex/g
<u> </u>	<del> </del>	Clostridium perfringens	IS 5887 (Part 4)	Qualitative
<u> </u>		<u> </u>	US FDA BAMChapter 16	Present or Absent / 25 g
		Clostridium perfringens	IS 5887 (Part 4)	≥ 10 CFU /g
<u> </u>	<u> </u>	<u>i</u>	US FDA BAMChapter 16	<u>i                                     </u>
	 	Sulfite reducing bacteria	ISO 15213	≥ 10 CFU /g
     	 	growing under anaerobic conditions/Sulphite reducing Clostridia		 
<u> </u>		FaecalStreptococci	IS 5887 (Part II)	Qualitative
	 	(Enterococci)	, , , , , , , , , , , , , , , , , , ,	Present or Absent / 25g
		Faecal Streptococci	IS 5887 (Part II)	≥ 10 CFU/g
	<del> </del>	Pseudomonas aeruginosa	IS 14843 / ISO 13720	≥ 10 CFU/g
		Salmonella spp.	IS 5887(Part 3)	Qualitative
			US FDA BAMChapter 6, 8 ISO 6579	Present or Absent / 25g
<u> </u>		Shigella spp.	IS 5887(Part 7)	Qualitative
l			US FDA BAM Chapter 6	Present or Absent / 25 g
ļ	<del> </del>	Staphylococcus aureus	IS 5887 (Part II)	Qualitative
İ	 	(Coagulase positive)		Present or Absent / 25 g
F		Staphylococcus aureus	IS 5887 (Part II)	≥ 10 CFU/g
		(Coagulase positive)	IS 5887(Part 8/Sec 1)/ ISO 6888 -1	-
	 		US FDA BAMChapter 12	
ļ	<del> </del>	Vibrio cholerae	IS 5887(Part V)	Qualitative
	 		US FDA BAMĆhapter 9	Present or Absent / 25 g
		Vibrio parahaemolyticus	IS 5887 (Part V)	Qualitative

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			US FDA BAMChapter 9	Present or Absent / 25 g
   	   	Enterobacteriaceae	IS/ISO 7402	≥ 10 CFU /g or ≥ 1 CFU/ml
   	   	Listeria monocytogenes	US FDA BAM Chapter 10, ISO 14988 (Part 1)	Qualitative Present or Absent / 25 g
	   	Bacillus cereus	IS 5887(Part 6) ISO 7932	<u>≥</u> 10 CFU/g
20.	Beverages (Alcoholic/ Non Alcoholic, Carbonated/ Non- carbonated)	Total Viable Count/Total Plate Count/Total Bacterial Count/Standard plate Count/ Aerobic Microbial Count/Aerobic bacterial Count /Aerobic	IS 5402	≥ 1 CFU/mI
     	†     	Plate Count / Heterotrophic Plate Count	US FDA BAM Chapter 3	≥ 1 CFU/ ml
   	<del> </del>	Total Coliforms/ Coliform Count/ Coliform Bacteria	IS 3752	<0.3 to 1.1x10 <sup>6</sup> MPN index/100 ml
			IS 5401 (Part 1) ISO 4831	≥ 1 CFU /ml Present or Absent/250
   			IS 5401 (Part 2)/ ISO 4831 US FDA BAMChapter 4	ml or 25 ml  > 0.3 to >10 <sup>6</sup> MPN  index / ml  > 1 CFU/ml  <3 to 1.1x10 <sup>6</sup> MPN  index / ml
	<del> </del>	Yeast and Mould Count	IS 5403 US FDA BAM Chapter 18	> 1 CFU/ml > 1 CFU/ml
           		Escherichia coli (Thermotolerant bacteria)	IS 5887(Part I)	Present or Absent /250ml or 25ml Present or Absent / 25g Present or Absent / g
I └─	<u> </u>	Escherichia coli	IS 5887(Part I)	<u>&gt;</u> 1 CFU/ml

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	 	 	1	0.3 to 1.1x10 <sup>6</sup> MPN index / ml
   	 	<del></del>	US FDA BAMChapter 4	43 to 1.1x10 <sup>6</sup> MPN index / ml
		Clostridium perfringens	IS 5887 (Part 4) US FDA BAM Chapter 16	Present or Absent /250ml or 25ml
	   	Clostridium perfringens	IS 5887 (Part 4) US FDA BAM Chapter 16	≥ 1 CFU / mI
		Sulfite reducing bacteria growing under anaerobic conditions/Sulphite reducing Clostridia	ISO 15213:	> 1 CFU / mI
	   	Faecal Streptococci (Enterococci)	IS 5887 (Part II)	Present or Absent / 250ml or 25 ml
	<del> </del>	Faecal Streptococci	IS 5887 (Part II)	≥ 1 CFU / ml
<u> </u>	<del> </del>	Pseudomonas aeruginosa	IS 14843	> 1 CFU / ml
   		Salmonella spp.	IS 5887(Part 3) US FDA BAM Chapter 6, ISO 6579	Present or Absent /250ml or 25ml
		Shigellaspp.	IS 5887(Part 7) US FDA BAMChapter 6	Present or Absent /250ml or 25ml
	<del> </del>	Staphylococcus aureus (Coagulase positive)	IS 5887(Part II)	Present or Absent / 250 ml or 25ml
		Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II), IS 5887(Part 8/Sec 1)/ ISO 6888 -1 US FDA BAM Chapter 12	> 1 CFU / mI
       		Vibrio cholerae	IS 5887(Part V) US FDA BAMChapter 9	Present or Absent /250ml or 25ml
<u> </u>	<del> </del>	Vibrio parahaemolyticus	IS 5887 (Part V)	Present or Absent/250

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			US FDA BAMChapter 9	ml or 25 ml
		Enterobacteriaceae	IS/ISO 7402	≥ 10 CFU /g or   ≥ 1 CFU/ml
	<del> </del>   	Listeria monocytogenes	US FDA BAMChapter 10 IS 14988 (Part 1)	Present or Absent/250 ml or 25 ml
	   	Bacillus cereus	IS 5887(Part 6) ISO 7932	≥ 1 CFU / ml
21.	Tea & Tea	Total Viable Count/Total	IS 5402	≥ 10 CFU/g
	Products	Plate Count/Total Bacterial Count/Standard plate Count/ Aerobic Microbial Count/Aerobic bacterial Count / Aerobic Plate Count / Heterotrophic Plate Count	US FDA BAMChapter 3	<u>&gt;</u> 10 CFU/g      -  -
		Total Coliforms/ Coliform	IS 5401 (Part 1)/	≥ 10 CFU /g
	 	Count/ Coliform Bacteria	ISO 4831	Present or Absent/25g
	   	   	IS 5401 (Part 2)/ ISO 4831	<0.3 to 1.1x10 <sup>6</sup> MPN index/g
		   	US FDA BAMChapter 4	≥ 10 CFU /g
	   		1 	<3 to 1.1x10 <sup>6</sup> MPN index/g MPN index/g
	 	Yeast and Mould Count	IS 5403	<u>&gt;</u> 10 CFU /g
			US FDA BAM Chapter 18	≥ 10 CFU /g
		Escherichia coli (Thermotolerant bacteria)	IS 5887(Part I)	Present or Absent / 25g Present or Absent / 1g
		Escherichia coli	IS 5887(Part I)	> 10 CFU /g 0.3 to 1.1x10 <sup>6</sup> MPN index/g
			US FDA BAMChapter 4	<3 to 1.1x10 <sup>6</sup> MPN

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	 		 	index/g
   		Clostridium perfringens	IS 5887 (Part 4) US FDA BAM Chapter 16	Present or Absent / 25g
		Clostridium perfringens	IS 5887 (Part 4) US FDA BAM Revision A, Chapter 16,	≥ 10 CFU /g
       		Sulfite reducing bacteria growing under anaerobic conditions/Sulphite reducing Clostridia	ISO 15213	≥ 10 CFU /g
       		Faecal Streptococci(Enterococci)	IS 5887 (Part II)	Present or Absent / or
   		Faecal Streptococci	IS 5887 (Part II)	≥ 10 CFU /g
	 	Pseudomonas aeruginosa	IS 14843	≥ 10 CFU /g
     		Salmonella spp.	IS 5887(Part 3) US FDA BAMChapter 6 ISO 6579	Qualitative Present or Absent / 25g
   		Shigellaspp.	IS 5887(Part 7) US FDA BAMChapter 6,	Qualitative Present or Absent / 25g
   		Staphylococcus aureus (Coagulase positive)	IS 5887(Part II)	Qualitative Present or Absent / 25g
		Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II): IS 5887(Part 8/Sec 1) / ISO 6888 -1 US FDA BAM Chapter 12	≥ 10 CFU /g
   	 	Vibrio cholerae	IS 5887(Part V) US FDA BAMChapter 9	Qualitative Present or Absent / 25g
	   	Vibrio parahaemolyticus	IS 5887 (Part V) US FDA BAMChapter 9	Qualitative Present or Absent / 25g
	<del> </del>	Enterobacteriaceae	IS/ISO 7402	≥ 10 CFU /g or ≥ 1 CFU/ml
	T	Listeria monocytogenes	US FDA BAMChapter 1	Present or Absent / 25g

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		T	IS 14988(Part 1):2001	
		Bacillus cereus	IS 5887(Part 6) ISO 7932	≥ 10 CFU /g
		Mould	AEC/B/SAP/F-18 Issue no.: 04, Issue date: 01.04.2018 (Visual Method)	Present/Absent
22.	Coffee, Chicory	Total Viable Count/Total	IS 5402	> 10 CFU/g
	and Cocoa Products	Plate Count/Total Bacterial Count/Standard plate Count/ Aerobic Microbial Count/Aerobic bacterial Count /Aerobic Plate Count / Heterotrophic Plate Count	US FDA BAMChapter 3	≥ 10 CFU/g
		Total Coliforms/ Coliform Count/ Coliform Bacteria	IS 5401 (Part 1)/ ISO 4831	≥ 10 CFU /g Present or Absent/25g
	   	<del> </del>	IS 5401 (Part 2)/	<0.3 to 1.1x10 <sup>6</sup> MPN index/g
			US FDA BAM Chapter 4	> 10 CFU /g <3 to 1.1x10 <sup>6</sup> MPN index/g
		Yeast and Mould Count	IS 5403	> 10 CFU /g
			US FDA BAM Chapter 18,	≥ 10 CFU /g
	<del>                                     </del>	Escherichia coli (Thermotolerant bacteria)	IS 5887(Part I)	Qualitative Present or Absent / 25g
		Escherichia coli	IS 5887(Part I)	≥ 10 CFU /g 0.3 to 1.1x10 <sup>6</sup> MPN index/g
	<del> </del>	<del> </del>	US FDA BAMChapter 4	<3 to 1.1x10 <sup>6</sup> MPN

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	T	T		index/g
   	†	Clostridium perfringens	IS 5887 (Part 4)/ US FDA BAM Chapter 16	Present or Absent / 25g
       	 	Clostridium perfringens	IS 5887 (Part 4): US FDA BAM, Revision A, Chapter 16,	≥ 10 CFU /g
       		Sulfite reducing bacteria growing under anaerobic conditions/Sulphite reducing Clostridia	ISO 15213	≥ 10 CFU /g
   		Faecal S <i>treptococci</i> (Enterococci)	IS 5887 (Part II)	Present or Absent / 25g
ļ	<del> </del>	Faecal Streptococci	IS 5887 (Part II)	> 10 CFU /g
   	<del>                                     </del>	Pseudomonas aeruginosa	IS 14843	<u>&gt;</u> 10 CFU /g
     	 	Salmonellaspp.	IS 5887(Part 3) US FDA BAMChapter 6, ISO 6579	Qualitative Present or Absent / 25g
   	†	Shigellaspp.	IS 5887(Part 7) US FDABAMChapter 6	Qualitative Present or Absent / 25g
   		Staphylococcus aureus (Coagulase positive)	IS 5887(Part II)	Qualitative Present or Absent / 25g
       	 	Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II) IS 5887(Part 8/Sec 1)/ ISO 6888 -1 US FDA BAMChapter 12	   <u>&gt;</u> 10 CFU /g
   	†	Vibrio cholerae	IS 5887(Part V) US FDA BAMChapter 9,	Qualitative Present or Absent / 25g
   	   	Vibrio parahaemolyticus	IS 5887 (Part V) US FDA BAMChapter 9	Qualitative Present or Absent / 25g
     	     	Enterobacteriaceae	IS/ISO 7402	≥ 10 CFU /g or   ≥ 1 CFU/ml
·	<del> </del>	Listeria monocytogenes	US FDA BAM Chapter 10,	Qualitative

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	   		IS 14988 (Part 1)	Present or Absent / 25g
	 	Bacillus cereus	IS 5887(Part 6), ISO 7932	≥ 10 CFU /g
		Moulds	AEC/B/SAP/F-18 Issue no.: 04, Issue date: 01.04.2018 (Visual Method)	Present/Absent
23.	Egg and Egg Products	Total Viable Count/Total Plate Count/Total Bacterial Count/Standard plate Count/ Aerobic	IS 5402	≥ 10 CFU/g
		Microbial Count/Aerobic bacterial Count /Aerobic Plate Count / Heterotrophic Plate Count	US FDA BAMChapter 3	≥ 10 CFU/g
	     	Total Coliforms/ Coliform Count/ Coliform Bacteria	IS 5401 (Part 1)/ ISO 4832	≥ 10 CFU /g
	   		IS 5401 (Part 2)/ ISO 4831	<0.3 to 1.1x10 <sup>6</sup> MPN index/g
			US FDA BAM Chapter 4	> 10 CFU/ g <3 to 1.1x10 <sup>6</sup> MPN index/g
	T	Yeast and Mould Count	IS 5403	≥ 10CFU/g
			US FDA BAMChapter 18	≥ 10 CFU/g
	 	Escherichia coli (Thermotolerant bacteria)	IS 5887(Part I)	Present or Absent / 25g Present or Absent /g
	   	Escherichia coli	IS 5887(Part I)	≥ 10 CFU /g 0.3 to 1.1x10 <sup>6</sup> MPN index/g
		     	US FDA BAM Chapter 4	<3 to 1.1x10 <sup>6</sup> MPN index/g
	<del> </del>	Clostridium perfringens	IS 5887 (Part 4)	Qualitative

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<u></u>			US FDA BAM Chapter 16	Present or Absent / 25 g
   		Clostridium perfringens	IS 5887 (Part 4) US FDA BAM Chapter 16	≥ 10 CFU /g
		Sulfite reducing bacteria growing under anaerobic conditions/Sulphite reducing Clostridia	ISO 15213	≥ 10 CFU /g
		Faecal streptococci	IS 5887 (Part II)	Qualitative
<u></u>		(Enterococci)	<u>i                                     </u>	Present or Absent / 25g
		Faecal streptococci	IS 5887 (Part II)	≥ 10 CFU/g
		Pseudomonas aeruginosa	IS 14843/ ISO 13720	<u>&gt;</u> 10 CFU/g
	 	Salmonella spp.	IS 5887(Part 3)	Qualitative
i ! L	 	 	US FDA BAMChapter 6, ISO 6579	Present or Absent / 25g
Γ	 	Shigellaspp.	IS 5887(Part 7),	Qualitative
<u> </u>	<u> </u>	<u> </u>	US FDA BAM Chapter 6,	Present or Absent / 25g
	 	Staphylococcus aureus	IS 5887 (Part II)	Qualitative
<u> </u>	<u> </u>	(Coagulase positive)		Present or Absent / 25g
         	 	Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II) IS 5887(Part 8/Sec 1)/ ISO 6888 -1 US FDA BAM Chapter 12	≥ 10 CFU/g
	 	Vibrio cholerae	IS 5887(Part V)	Qualitative
<u></u>	<u> </u>	<u> </u>	US FDA BAM, Chapter 9	Present or Absent / 25 g
l I	 	Vibrio parahaemolyticus	IS 5887 (Part V)	Qualitative
<u> </u>	i 	<u> </u>	US FDA BAMChapter 9	Present or Absent / 25 g
   		Enterobacteriaceae	IS/ISO 7402	≥ 10 CFU /g or ≥ 1 CFU/ml
 	 	Listeria monocytogenes	US FDA BAM Chapter 10, IS 14988 (Part 1):2001	Qualitative Present or Absent / 25 g
   		Bacillus cereus	IS 5887(Part 6) ISO 7932	≥ 10 CFU/g
24.	Nutritional	Total Viable Count/Total	IS 5402	<u>≥</u> 10 CFU/g

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               	Supplements, Vitamin and Mineral Premixes,HealthF oods,FortifiedFoo ds,Probiotic Foods,	Plate Count/Total Bacterial Count/Standard plate Count/ Aerobic Microbial Count/Aerobic bacterial Count / Aerobic Plate Count / Heterotrophic Plate Count	US FDA BAM Chapter 3	≥ 10 CFU/g
   	Neutraceutical Products	Total Coliforms/ Coliform Count/ Coliform Bacteria	IS 5401 (Part 1) / ISO 4832	≥ 10 CFU /g
     			IS 5401 (Part 2)/ ISO 4831 US FDA BAM Chapter 4	<pre>&lt;0.3 to 1.1x10<sup>6</sup> MPN index/g</pre>
ļ	<u> </u>	Yeast and Mould Count	IS 5403	≥ 10CFU/g
ļ	T		US FDA BAMChapter 18	≥ 10 CFU/g
		Escherichia coli (Thermotolerant bacteria)	IS 5887(Part I)	Qualitative Present or Absent / 25g Present or Absent /g
	†	Escherichia coli	IS 5887(Part I)	≥ 10 CFU /g
   	   			0.3 to 1.1x10 <sup>6</sup> MPN index/g
   	<del>                                     </del>		US FDA BAMChapter 4	<3 to 1.1x10 <sup>6</sup> MPN index/g
	T	Clostridium perfringens	IS 5887 (Part 4), US FDA BAMChapter 16	Qualitative Present or Absent / 25 g
	   	Clostridium perfringens	IS 5887 (Part 4) US FDA BAM Chapter 16	≥ 10 CFU /g
             	           	Sulfite reducing bacteria growing under anaerobic conditions/Sulphite reducing Clostridia	ISO 15213	≥ 10 CFU /g
	<del> </del>	Faecal <i>Streptococci</i>	IS 5887 (Part II)	Qualitative

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	<del>                                     </del>	(Enterococci)		Present or Absent / 25g
		Faecal Streptococci	IS 5887 (Part II)	≥ 10 CFU/g
	 	Pseudomonas aeruginosa	IS 14843/ ISO 13720	≥ 10 CFU/g
F	 	Salmonella spp.	IS 5887(Part 3)	Qualitative
   	 	 	US FDA BAMChapter 6 ISO 6579	Present or Absent / 25g
ļ		Shigellaspp.	IS 5887(Part 7 ) US FDA BAM,Chapter 6	Qualitative Present or Absent / 25g
<u> </u>		Staphylococcus aureus	IS 5887 (Part II )	Qualitative
	 	(Coagulase positive)	1	Present or Absent / 25g
		Staphylococcus aureus	IS 5887 (Part II)	≥ 10 CFU/g
	    -	(Coagulase positive)	IS 5887(Part 8/Sec 1)/ ISO 6888 -1	
ļ	 <del> </del>	 	US FDA BAMChapter 12	
İ	 	Vibrio cholerae	IS 5887 (Part V)	Qualitative
<u> </u>	 		US FDA BAMChapter 9	Present or Absent / 25 g
           		Vibrio parahaemolyticus	IS 5887 (Part V) :1976, RA 2018 US FDA BAM, 8 <sup>th</sup> Edition, Revision A, Chapter 9, May 2004	Qualitative Present or Absent / 25 g
     		Enterobacteriaceae	IS/ISO 7402: 1993, RA 2009	≥ 10 CFU /g or   ≥ 1 CFU/ml
		Listeria monocytogenes	US FDA BAM,8 <sup>th</sup> Edition, Revision A, Chapter 10, Updated March 2017 IS 14988(Part 1):2001	Qualitative Present or Absent / 25 g
	 	Bacillus cereus	IS 5887(Part 6):2012 ISO 7932:2004	≥ 10 CFU/g
		Lactic acid bacteria	IS 12899:1989	≥10 CFU/g
25.	Convenience	Total Viable Count/Total	IS 5402:2012	≥ 10 CFU/g

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Foods, Cooked Foods,Precooked Foods,Ready to Eat Variants	Plate Count/Total Bacterial Count/Standard plate Count/ Aerobic Microbial Count/Aerobic		
     		bacterial Count /Aerobic Plate Count / Heterotrophic Plate Count	US FDA BAM, 8 <sup>th</sup> Edition, Revision A,Chapter 3, Jan 2001	≥ 10 CFU/g
   		Total Coliforms/ Coliform Count/ Coliform Bacteria	IS 5401 (Part 1):2002 , RA 2018 / ISO 4832 : 1991	≥ 10 CFU /g
			IS 5401 (Part 2):2012 / ISO 4831:2006	<0.3 to 1.1x10 <sup>6</sup> MPN index/g
 	 <del> </del> 	 	US FDA BAM, 8 <sup>th</sup> Edition, Revision A, Chapter 4,Sept 2002,Updated July 2017	> 10 CFU/ g <3 to 1.1x10 <sup>6</sup> MPN index/g
 		Yeast and Mould Count	IS 5403:1999, RA 2018 US FDA BAM,8 <sup>th</sup> Edition, Sept2002,Updated Feb 2013, Revision A,Chapter 18,April 2001	≥ 10CFU/g ≥ 10 CFU/g 3 to 2.3x10 <sup>6</sup> MPN index/g
 		Escherichia coli (Thermotolerant bacteria) Escherichia coli	IS 5887(Part I):1976, RA 2018 IS 5887(Part I):1976, RA 2018	Present or Absent / 25g Present or Absent / g  ≥ 10 CFU /g  0.3 to 1.1x10 <sup>6</sup> MPN index/g
			US FDA BAM ,8 <sup>th</sup> Edition, Revision A,Chapter 4,Sept2002,Updated July 2017	<3 to 1.1x10 <sup>6</sup> MPN index/g
		Clostridium perfringens	IS 5887 (Part 4):1999, RA 2018 US FDA BAM, 8 <sup>th</sup> Edition, Revision A,Chapter 16, Jan 2001	Present or Absent / 25 g
		Clostridium perfringens	IS 5887 (Part 4):1999,	≥ 10 CFU /g

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       			RA 2018 US FDA BAM, 8 <sup>th</sup> Edition, Revision A, Chapter 16, Jan 2001	
       		Sulfite reducing bacteria growing under anaerobic conditions/Sulphite reducing Clostridia	ISO 15213:2003	≥ 10 CFU /g
		FaecalStreptococci(Enter	IS 5887 (Part II):1976,	Qualitative
<u> </u>	i +	ococci)	RA 2018	Present or Absent / 25g
   	 	Faecal Streptococci	IS 5887 (Part II):1976, RA 2018	≥ 10 CFU/g
   	 	Pseudomonas aeruginosa	IS 14843:2000, RA 2009 / ISO 13720:1995	≥ 10 CFU/g
               		Salmonella spp.	IS 5887(Part 3) :1999, RA 2018 US FDA BAM,8 <sup>th</sup> Edition, Revision A, Chapter 6, Jan 2001,Updated March 2018 ISO 6579:2017	Qualitative Present or Absent / 25g
   	 	Shigellaspp.	IS 5887(Part 7) US FDA BAMChapter 6	Qualitative Present or Absent / 25g
	   	Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II)	Qualitative Present or Absent / 25g
         	 	Staphylococcus aureus   (Coagulase positive)	IS 5887 (Part II) IS 5887(Part 8/Sec 1)/ ISO 6888 -1 US FDA BAM Chapter 12	<u>&gt;</u> 10 CFU/g
   	   	Vibrio cholerae	IS 5887(Part V) US FDA BAM Chapter 9	Qualitative Present or Absent / 25 g
     	     	Vibrio parahaemolyticus	IS 5887 (Part V) US FDA BAMChapter 9	Qualitative Present or Absent / 25 g
<u> </u>		Enterobacteriaceae	IS/ISO 7402	≥ 10 CFU /g or

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	<u> </u>			≥ 1 CFU/mI
	<del> </del>	Listeria monocytogenes	US FDA BAM Chapter 10	Qualitative
			IS 14988(Part 1)	Present or Absent / 25 g
		Bacillus cereus	IS 5887(Part 6) ISO 7932	≥ 10 CFU/g
26.	Snacks & Instant Mixes	Total Viable Count/Total Plate Count/Total	IS 5402	≥ 10 CFU/g
		Bacterial Count/Standard   plate Count/ Aerobic   Microbial Count/Aerobic   bacterial Count / Aerobic   Plate Count / Heterotrophic Plate Count	US FDA BAM Chapter 3	≥ 10 CFU/g
	   	Total Coliforms/ Coliform Count/ Coliform Bacteria	IS 5401 (Part 1)/ ISO 4832	≥ 10 CFU /g
	   	   	IS 5401 (Part 2) / ISO 4831	<0.3 to 1.1x10 <sup>6</sup> MPN index/g
	   		US FDA BAMChapter 4	<u>≥</u> 10 CFU/ g
	<del> </del>   	<del> </del>   		<3 to 1.1x10 <sup>6</sup> MPN index/g
	T	Yeast and Mould Count	IS 5403:1999, RA 2018	≥ 10CFU/g
			US FDA BAM Chapter 18	≥ 10 CFU/g
	<del> </del>   	Escherichia coli (Thermotolerant bacteria)	IS 5887(Part I)	Present or Absent / 25g Present or Absent /g
		Escherichia coli	IS 5887(Part I)	> 10 CFU /g 0.3 to 1.1x10 <sup>6</sup> MPN index/g
	   		US FDA BAMChapter 4	<3 to 1.1x10 <sup>6</sup> MPN index/g
		Clostridium perfringens	IS 5887 (Part 4) US FDA BAM Chapter 16	Qualitative Present or Absent / 25 g

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	   	Clostridium perfringens	IS 5887 (Part 4)/ US FDA BAM Chapter 16	≥ 10 CFU /g
       		Sulfite reducing bacteria growing under anaerobic conditions/Sulphite reducing Clostridia	ISO 15213	<u>≥</u> 10 CFU /g
   	 	FaecalStreptococci (Enterococci)	IS 5887 (Part II)	Qualitative Present or Absent / 25g
<u> </u>	<u> </u>	Faecal Streptococci	IS 5887 (Part II)	> 10 CFU/g
   	<del> </del>   	Pseudomonas aeruginosa	IS 14843/ ISO 13720	≥ 10 CFU/g
		Salmonella spp.	IS 5887(Part 3) US FDA BAMChapter 6, ISO 6579	Qualitative Present or Absent /25g
   		Shigellaspp.	IS 5887(Part 7) US FDA BAMChapter 6	Qualitative Present or Absent / 25g
   		Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II)	Qualitative Present or Absent / 25g
		Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II) IS 5887 (Part 8/Sec 1), Amendment No.1/ ISO 6888 -1 US FDA BAM Chapter 12	≥ 10 CFU/g
   	<del> </del>   	Vibrio cholerae	IS 5887(Part V) US FDA BAMChapter 9	Qualitative Present or Absent / 25 g
		Vibrio parahaemolyticus	IS 5887 (Part V) US FDA BAMChapter 9	Qualitative Present or Absent / 25 g
		Enterobacteriaceae	IS/ISO 7402	≥ 10 CFU /g or ≥ 1 CFU/mI
   		Listeria monocytogenes	US FDA BAM Chapter 10 IS 14988 (Part 1)	Qualitative Present or Absent / 25 g
		Bacillus cereus	IS 5887(Part 6)/ ISO 7932	≥ 10 CFU/g

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27.	Food Additives & Preservatives	Total Viable Count/Total Plate Count/Total	IS 5402	≥ 10 CFU/g or   ≥1 CFU/ml
		Bacterial Count/Standard plate Count/ Aerobic Microbial Count/Aerobic bacterial Count /Aerobic Plate Count / Heterotrophic Plate Count	US FDA BAM Chapter 3	≥ 10 CFU/g or ≥ 1 CFU/ml
		Total Coliforms/ Coliform	IS 5401 (Part 1)/	≥ 10 CFU /g or
<u> </u> 	<u> </u>	Count/ Coliform Bacteria	ISO 4832	<u>&gt; 1 CFU/ml</u>
   	 	 	IS 5401 (Part 2)/ ISO 4831	<0.3 to 1.1x10 <sup>6</sup> MPN index/g or ml
   	<del> </del>		US FDA BAMChapter 4	≥ 10 CFU/ g or ≥ 1 CFU /ml
       		Yeast and Mould Count	IS 5403:1999	Present or Absent / 1 g or ml > 10 CFU/g or > 1 CFU/ml
   	 		US FDA BAM Revision A,Chapter 18	≥ 10 CFU /g or≥ 1 CFU/ml
		Escherichia coli (Thermotolerant bacteria)	IS 5887(Part I)	Present or Absent / 25g or 25 ml Present or Absent /1 g or ml
 	 	Escherichia coli	IS 5887(Part I)	≥ 10 CFU /g or ≥ 1 CFU/ml
   	   	   	   	0.3 to 1.1x10 <sup>6</sup> MPN index/g or ml
	   		US FDA BAMChapter 4	<3 to 1.1x10 <sup>6</sup> MPN index /g or ml
		Salmonella spp.	IS 5887(Part 3) US FDA BAMChapter 6 ISO 6579	Qualitative (Present or Absent / 25 g or 25 ml)

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		Enterobacteriaceae	IS/ISO 7402	≥ 10 CFU /g or ≥ 1 CFU/ml
28.	Allergens in Food & Agricultural Products	Gluten (Gliadin)	ELISA Method AEC/B/SAP/F-22, Issue No. 04, Issue Date: 01.04.2018	5 to 80 mg/kg
     		Milk Allergen	ELISA Method AEC/B/SAP/F-24, Issue No. 04, Issue Date: 01.04.2018	2.5 to 67.5 mg/kg
           		Peanut Allergen	ELISA Method AEC/B/SAP/F-23, Issue No. 04, Issue Date: 01.04.2018	2.5 to 20 mg/kg
29.	Herbal/Medicinal Plants	Total Viable Count/Total Plate Count/Total Bacterial Count/Standard plate Count/ Aerobic Microbial Count/Aerobic bacterial Count / Aerobic Plate Count / Heterotrophic Plate Count	Quality Control Methods for Medicinal Plant Materials,WHO	≥ 10 CFU/g or ≥ 1 CFU/ ml
       		Yeast and Mould Count	Quality Control Methods for Medicinal Plant Materials,WHO	≥ 10 CFU/g or ≥ 1 CFU/ ml
		Enterobacteriaceae and other Gram-Negative bacteria	Quality Control Methods for Medicinal Plant Materials,WHO	≥ 10 CFU/g or ≥ 1 CFU/ml
       		Escherichia coli	Quality Control Methods for Medicinal Plant Materials, WHO	Present/ Absent / g or ml
		Salmonella spp.	Quality Control Methods for Medicinal Plant Materials, WHO	Present/ Absent / g or ml

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		Pseudomonas aeruginosa	Quality Control Methods for Medicinal Plant Materials, WHO	Present/ Absent /g or ml
	 	Staphylococcus aureus	Quality Control Methods for Medicinal Plant Materials, WHO	Qualitative (Present/ Absent / g or ml)
IV.	ANIMAL FEED			
1.	Animal Feeds	Total Viable Count/Total Plate Count/Total Bacterial Count/Standard plate Count/ Aerobic Microbial Count/Aerobic bacterial Count / Aerobic Plate Count / Heterotrophic Plate Count	IS 5402:2012 US FDA BAM Chapter 3	≥ 10 CFU/g ≥ 10 CFU/g
   	<del> </del>   	Total Coliforms/ Coliform Count/ Coliform Bacteria	IS 5401 (Part 1)/ ISO 4832	≥ 10 CFU/g
	   		IS 5401 (Part 2)/ ISO 4831	<0.3 to 1.1x10 <sup>6</sup> MPN index/g
			US FDA BAM Chapter 4	≥ 10 CFU/g   <3 to 1.1x10 <sup>6</sup> MPN   index/g
	     	Yeast and Mould Count	IS 5403 US FDA BAM Chapter 18	≥ 10CFU/g ≥ 10 CFU/g
		Escherichia coli (Thermotolerant bacteria)	IS 5887(Part I)	Present or Absent / 25g Present orAbsent /g
	 	Escherichia coli	IS 5887(Part I)	≥ 10 CFU/g 0.3 to 1.1x10 <sup>6</sup> MPN index/g
   	<del> </del>	   	US FDA BAM Chapter 4	<pre>&lt;3 to 1.1x10<sup>6</sup> MPN index/g</pre>

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F	T	Clostridium perfringens	IS 5887 (Part 4)	Qualitative
<u>i</u>	<u>i</u>	<u> </u>	US FDA BAM Chapter 1	Present or Absent / 25 g
	[ ]	Clostridium perfringens	IS 5887 (Part 4)	<u>&gt;</u> 10 CFU /g
<u> </u>	<u> </u>	<u></u>	US FDA BAM Chapter 16	 
	 	Sulfite reducing bacteria growing under anaerobic conditions/Sulphite reducing Clostridia	ISO 15213 	≥ 10 CFU /g
		Faecal Streptococci	IS 5887 (Part II)	Qualitative
<u></u>	<u> </u>	(Enterococci)		Present or Absent / 25g
L	 	Faecal Streptococci	IS 5887 (Part II)	≥ 10 CFU/g
   	 	Pseudomonas aeruginosa	IS 14843/ ISO 13720	≥ 10 CFU/g
		Salmonella spp.	IS 5887(Part 3) US FDA BAM Chapter 6, ISO 6579	Qualitative Present or Absent / 25g
	l I	Shigella spp.	IS 5887(Part 7)	Qualitative
<u> </u>	<u>i</u>	<u> </u>	US FDA BAM Chapter 6	Present or Absent / 25g
	 	Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II):1976,	Qualitative   Present or Absent / 25g
	       	Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II) IS 5887(Part 8/Sec 1)/ ISO 6888 -1 US FDA BAM Chapter 12	≥ 10 CFU/g
	   	Vibrio cholerae	IS 5887(Part V) US FDA BAM Chapter 9	Qualitative Present or Absent / 25 g
	<del> </del>	Vibrio parahaemolyticus	IS 5887 (Part V) US FDA BAM Chapter 9	Qualitative Present or Absent / 25 g
   	<del>                                     </del>	Enterobacteriaceae	IS/ISO 7402	≥ 10 CFU /g or ≥ 1 CFU/ml
<u> </u>	<del> </del>	Listeria	US FDA BAM Chapter 10/	Qualitative
		monocytogenes	IS 14988 (Part 1)	Present or Absent / 25 g
		Bacillus cereus	IS 5887(Part 6)/ ISO 7932	≥ 10 CFU/g

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	Pet Foods	Total Viable Count/Total Plate Count/Total	IS 5402	≥ 10 CFU/g
		Bacterial Count/Standard plate Count/ Aerobic Microbial Count/Aerobic bacterial Count /Aerobic Plate Count / Heterotrophic Plate Count	US FDA BAM Chapter 3	≥ 10 CFU/g
   		Total Coliforms/ Coliform Count/ Coliform Bacteria	IS 5401 (Part 1)/ ISO 4832	≥ 10 CFU /g
	   		IS 5401 (Part 2)/ ISO 4831	<0.3 to 1.1x10 <sup>6</sup> MPN index/g
	<del> </del>		US FDA BAM Chapter 4	≥ 10 CFU/ g
   				<3 to 1.1x10 <sup>6</sup> MPN index/g
		Yeast and Mould Count	IS 5403	≥ 10 CFU/g
   			US FDA BAM Chapter 18	≥ 10 CFU/g
		Escherichia coli (Thermotolerant bacteria)	IS 5887(Part I)	Qualitative Present or Absent / 25g Present or Absent / g
	†	Escherichia coli	IS 5887(Part I) B	≥ 10 CFU /g 0.3 to 1.1x10 <sup>6</sup> MPN index/g
   	   		US FDA BAM Chapter 4	<3 to 1.1x10 <sup>6</sup> MPN index/g
   	   	Clostridium perfringens	IS 5887 (Part 4) US FDA BAM Chapter 16	Qualitative Present or Absent / 25 g
	   	Clostridium perfringens	IS 5887 (Part 4) US FDA BAM Chapter 16	≥ 10 CFU /g
	 	Sulfite reducing bacteria growing under anaerobic conditions/Sulphite reducing Clostridia	ISO 15213	≥ 10 CFU /g

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       		FaecalStreptococci(Enter ococci)	IS 5887 (Part II)	Qualitative Present or Absent / 25g
F	<u> </u>	Faecal Streptococci	IS 5887 (Part II)	≥ 10 CFU/g
   		Pseudomonas aeruginosa	IS 14843 / ISO 13720	≥ 10 CFU/g
       		Salmonella spp.	IS 5887(Part 3), US FDA BAM Chapter 6, ISO 6579	Qualitative Present or Absent / 25g
       		Shigella spp.	IS 5887(Part 7) US FDA BAM Chapter 6	Qualitative Present or Absent / 25g Present or Absent /g
   		Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II)	Qualitative Present or Absent / 25g
         		Staphylococcus aureus (Coagulase positive)	IS 5887 (Part II) IS 5887(Part 8/Sec 1)/ ISO 6888 -1/ US FDA BAM Chapter 12	≥ 10 CFU/g
   	 	Vibrio cholerae	IS 5887(Part V) US FDA BAM Chapter 9	Qualitative Present or Absent / 25 g
	<del> </del>   	Vibrio parahaemolyticus	IS 5887 (Part V) US FDA BAM Chapter 9	Qualitative Present or Absent / 25 g
   	   	Enterobacteriaceae	IS/ISO 7402	≥ 10 CFU /g or   ≥ 1 CFU/ml
   	   	Listeria monocytogenes	US FDA BAM Chapter 10 IS 14988 (Part 1)	Qualitative Present or Absent / 25 g
   	   	Bacillus cereus	IS 5887 (Part 6) ISO 7932	≥ 10 CFU/g
V.	BIOLOGICAL TEST	S ON OTHER MISCELLANE	OUS TEST ITEMS	
1.	Packaging Materials, Health Care Products	Total Aerobic Microbial Count	ISO 11737-1 AEC/B/SAP/MS-5,Issue date: 01.04.2018	> 10 CFU/g

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	(Diapers, Condoms, Gels)	Yeast and Mould Count	ISO 11737-1 AEC/B/SAP/MS-6,Issue date: 01.04.2018	> 10 CFU/g
		Total Anaerobic Microbial Count	ISO 11737-1 AEC/B/SAP/MS-7,Issue date: 01.04.2018	> 10 CFU/g
	 	E.coli	USP 40: 2017 AEC/B/SAP/MS-10, Issue date: 01.04.2018	Qualitative   (Present/ Absent /10g)
		S.aureus	USP 40: 2017 AEC/B/SAP/MS-9, Issue date: 01.04.2018	Qualitative (Present/ Absent /10g)
		Pseudomonas aeruginosa	USP 40: 2017 AEC/B/SAP/MS-8, Issue date: 01.04.2018	Qualitative (Present/ Absent /10g)
		Enterobacteriaceae	USP 40: 2017 AEC/B/SAP/MS-11, Issue date: 01.04.2018	Qualitative (Present/ Absent /10g)
2.	Organic Fertilizers	Pathogenecity test	The Fertilizer (Control) Order, 2013, Sch.IV, Part D, Page no.144-H	Qualitative (Present/Absent /30 g)
VI.	AYUSH PRODUCTS			
1.	Ayurvedic,Unani, Siddha, Homeopathic and Herbal	Total Aerobic Microbial Count (Plate count for bacteria and Plate count for Fungus)	API, Part II,Vol-3, 2.4.1	≥ 10 CFU/g or   ≥ 1 CFU/ ml
	products	E.coli	API, Part II,Vol-3, 2.4.2	Qualitative (Present/ Absent /g or ml)
		Staphylococcus aureus	API, Part II,Vol-3, 2.4.2	Qualitative (Present/ Absent /g or ml)

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		Pseudomonas aeruginosa	API, Part II,Vol-3, 2.4.2	Qualitative (Present/ Absent /g or ml)
		Salmonella spp.	API, Part II,Vol-3, 2.4.2	Qualitative (Present/ Absent /g or ml)

<sup>\*</sup>NOTE: The Laboratory has demonstrated competence for the stated scope for WATER. This however <u>does not fully cover</u>the specification requirements of BIS for the Packaged Drinking Water as per IS:14543 and the Packaged Natural Mineral Water IS:13428.

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		CHEMICAI	L TESTING	
ī.	ATMOSPHERIC PO	DLLUTION	   	
1.	Ambient Air Quality	Suspended Particulate  Matter	IS 5182 (Part 4)	10 to 1000 μg/m <sup>3</sup>
	Fugitive Emission	Particulate Matter (Size less than 10 µm) or PM <sub>10</sub>	IS 5182 (Part 23) AEC/C/SAP/AA-1 Issue no.: 04 Issue date: 01.04.2018	2 to 1000 µg/m <sup>3</sup>
	           	Particulate Matter (Size less than 2.5 μm) or PM <sub>2.5</sub>	AEC/C/SAP/AA-1, Issue no.: 04 Issue date: 01.04.2018 USEPA CFR 40, Part 50, Appendix L	0.4 to 1000 µg/m <sup>3</sup>
	         	Sulphur Dioxide	IS 5182 (Part 2) AEC/C/SAP/AA-2 Issue no.: 04 Issue date: 01.04.2018	4 to 1000 μg/m <sup>3</sup>
		Nitrogen Dioxide	IS 5182 (Part 6): 2006, RA 2017 AEC/C/SAP/AA-3, Issue no.: 04 Issue date: 01.04.2018	6.5 to 1000 µg/m <sup>3</sup>
		Ozone	Methods of Air Sampling and Analysis (AWMA), Method 411,Page no. 403 AEC/C/SAP/AA-10 Issue no.: 04 Issue date: 01.04.2018	19.6 to 200 μg/m <sup>3</sup>
	       	Ammonia	Methods of Air Sampling and Analysis (AWMA), Method 401, Page	40 to 400 μg/m <sup>3</sup>

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	         		no.35,1988 AEC/C/SAP/AA-7, Issue no.: 04 Issue date: 01.04.2018	4.0 to 400 μg/m³
		Benzene	IS 5182 (Part 11) AEC/C/SAP/INS/5-6, Issue no.: 04 Issue date: 01.04.2018	1 to 100 μg/m <sup>3</sup>
	       	Benzo (a) pyrene (BaP) Particulate Phase only	IS 5182 (Part 12)AEC/C/SAP/INS/5-7 Issue no.: 04, Issue date: 01.04.2018	0.2 to 100 ng/m <sup>3</sup>
		Carbon Monoxide	CPCB Guidelines,37 Page no.16 AEC/C/SAP/INS/3-9, Issue no.: 04 Issue date: 01.04.2018	0.5 to 20 mg/m <sup>3</sup>
	<del> </del>	Chlorine	IS 5182 (Part XIX)	1 to 200 μg/m <sup>3</sup>
	T	Hydrogen Sulphide	IS 5182 (Part VII)	6 to 400 μg/m <sup>3</sup>
		Lead	IS 5182 (Part 22) Methods of Air Sampling and Analysis (AWMA), Method 822, Page no. 608, EPA/625/R-96/010 a Compendium Method IO- 3.1 & 3.2, AEC/C/SAP/INS/4-16, Issue no.: 04 Issue date: 01.04.2018	0.02 to 500 μg/m³
		Nickel	Methods of Air Sampling and Analysis (AWMA), Method 822, Page no. 608, EPA/625/R-96/010 a Compendium Method IO-	3 to 500 ng/m <sup>3</sup>

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         	         	         	3.1 & 3.2, Jun 1999 AEC/C/SAP/INS/4-16,Issue no.: 04 Issue date: 01.04.2018	
		Arsenic	EPA/625/R-96/010 a Compendium Method IO- 3.1 & 3.2, Jun 1999 AEC/C/SAP/INS/4-16Issue no.: 04 Issue date: 01.04.2018	0.3 to 500 ng/m <sup>3</sup>
		Iron	EPA/625/R-96/010 a Compendium Method IO- 3.1 & 3.2, Methods of Air Sampling and Analysis (AWMA), 3 <sup>rd</sup> Ed., Method 822, Page no. 608,	0.02 to 500 μg/m <sup>3</sup>
		Chromium	EPA/625/R-96/010 a Compendium Method IO- 3.1 & 3.2, Methods of Air Sampling and Analysis (AWMA), 3 <sup>rd</sup> Ed., Method 822, Page no. 608	0.02 to 500 μg/m <sup>3</sup>
		Cadmium	EPA/625/R-96/010 a Compendium Method IO- 3.1 & 3.2, Methods of Air Sampling and Analysis (AWMA), 3 <sup>rd</sup> Ed., Method 822, Page no. 608	0.02 to 500 µg/m <sup>3</sup>
     	T	Copper	EPA/625/R-96/010 a Compendium Method IO- 3.1 & 3.2,	0.02 to 500 μg/m <sup>3</sup>

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			Methods of Air Sampling and Analysis (AWMA), 3 <sup>rd</sup> Ed., Method 822, Page no. 608	
		Zinc	EPA/625/R-96/010 a Compendium Method IO- 3.1 & 3.2, Methods of Air Sampling and Analysis (AWMA), Method 822, Page no. 608	0.02 to 500 μg/m <sup>3</sup>
		Mercury	EPA/625/R-96/010 a Compendium Method IO- 3.4, Sampling & Analysis for Atmosphere Mercury, Ministry of Environment, Japan, AEC/C/SAP/INS/4-54, Issue No. 04, Issue Date 01.04.2018	0.06 to 50 μg/m <sup>3</sup>
     	Meteorological Parameters	*Wind Velocity	AEC/SAM/15, Issue No.: 04, Issue Date: 01.04.2018	0.1 to 30 km/h
		*Wind Direction	AEC/SAM/15, Issue No.: 04, Issue Date: 01.04.2018	Qualitative
   	 	*Relative Humidity	AEC/SAM/15, Issue No.: 04, Issue Date: 01.04.2018	25 to 100 %
		*Temperature	AEC/SAM/15, Issue No.: 04, Issue Date: 01.04.2018	1°C to 55 °C
<b>2</b> .	Stack Emission	Particulate Matter	IS 11255 (Part 1) AEC/C/SAP/SA-3 Issue no.: 04 Issue date: 01.04.2018	10 to 1000 mg/Nm <sup>3</sup>

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		Sulphur Dioxide	IS 11255 (Part 2) AEC/C/SAP/SA-5, Issue no.: 04 Issue date:	5 to 500 mg/Nm <sup>3</sup> > 2 ppm
 	 <del> </del>	Ovides of Nitrogen	01.04.2018	> 0.02 kg/day
<u> </u>	<del>-</del>	Oxides of Nitrogen Carbon Dioxide	IS 11255 (Part 7) IS 13270	10 to 500mg/Nm <sup>3</sup> 0.2to15 %
İ		Carbon Dioxide	15 13270	0.2015 %
	<del>                                     </del>	Carbon Monoxide	IS 13270	0.2to6 %
 	<del> </del>   	Oxygen	IS 13270	1to21 %
             		Mercury	US EPA Method no.29, Feb 2014 AEC/C/SAP/INS/4-56 Issue no.: 04 Issue date: 01.04.2018 Series: LATS/80/2013-2014	0.01 to 50 mg/Nm <sup>3</sup>
		*Flue Gas Velocity	IS 11255 (Part 3):2008 CPCB Emission Regulation Part (III) AEC/SAM/16, Issue No.: 04, Issue Date: 01.04.2018	1 to 10 m/s
             		*Flue Gas Temperature	IS 11255 (Part 3):2008 CPCB Emission Regulation Part (III) AEC/SAM/16, Issue No.: 04, Issue Date: 01.04.2018	20°C to 200 °C
		*Flue Gas Quantity	IS 11255 (Part 3):2008 CPCB Emission Regulation Part (III) AEC/SAM/16, Issue No.: 04, Issue Date: 01.04.2018	5 to 75000 Nm³/h

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3.	Ambient Noise (Excluding vibration)	Noise Level (Ld,Ln,Ldn,Lmin,Lmax,L50,L90, L10)	IS 9876 CPCB Protocol for Ambient Level Noise Monitoring, July 2015 AEC/C/SAP/SAM/35& 36, Issue no.:4, Issue date 01.04.2018	30to140 dB (A)
4.	Source Noise (Excluding vibration): Work Room/Place and D.G. Set	Noise Level	IS 9876 CPCB Protocol for Ambient Level Noise Monitoring, July 2015 AEC/C/SAP/SAM/35& 36, Issue no.:4, Issue date 01.04.2018	30to140 dB (A)
5.	Work Place	Oil Mist	NIOSH - 5026	1 to 200 mg/m <sup>3</sup>
	Environment/	Benzene	NIOSH – 1501	0.1 to 100 mg/m <sup>3</sup>
	Indoor Air Quality	Toluene	NIOSH – 1501	0.1 to 100 mg/m <sup>3</sup>
		Xylene	NIOSH - 1501	0.1 to 100 mg/m <sup>3</sup>
		Particulates Total	NIOSH - 0500	0.1 to 100 mg/m <sup>3</sup>
		Cadmium	NIOSH - 7303	0.01 to 100 mg/m <sup>3</sup>
		Chromium	NIOSH – 7303	0.01 to 100 mg/m <sup>3</sup>
		Copper	NIOSH – 7303	0.01 to 100 mg/m <sup>3</sup>
	 	Iron	NIOSH – 7303	0.01 to 100 mg/m <sup>3</sup>
	 	Lead	NIOSH - 7303	0.01 to 100 mg/m <sup>3</sup>
	 	Nickel	NIOSH - 7303	0.01 to 100 mg/m <sup>3</sup>
	 	Arsenic	NIOSH - 7303	0.01 to 100 mg/m <sup>3</sup>
	 	Zinc	NIOSH - 7303	0.01 to 100 mg/m <sup>3</sup>
īI.	GASES		 	
	Compressed Air	*Moisture	By Dew Point Meter AEC/C/SAP/CA-3, Issue No.: 04, Issue Date: 01.04.2018	0.01 to 2.3 g/kg 0 to 23000 ppm 0 to 2.3 %

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		Oil Content	AEC/C/SAP/CA-9, Issue No.: 04, Issue Date: 01.04.2018	0.0005 to 10 mg/m <sup>3</sup>
		*Particle Size   0.3 µm   0.5 µm   1.0 µm   2.5 µm   5.0 µm   10 µm	AEC/C/SAP/CA-1, Issue No.: 04, Issue Date: 01.04.2018	1 to 350000 Particle/m <sup>3</sup>
       		*Dew Point	AEC/C/SAP/CA-2, Issue No.: 04, Issue Date: 01.04.2018	-80°C to 30°C
III.	POLLUTION & ENV	IRONMENT	 	 
1.	Waste Water (Effluents /	Aluminium	APHA 3550-Al-B,3-63 IS 3025 (Part 55)	0.025 to 100 mg/L
   	Sewage)	Ammonical Nitrogen	APHA 4500 NH <sub>3</sub> , B & C, 4 - 114, 4-116	5 to 1000 mg/L
     	     	Arsenic	APHA 4500 NH <sub>3</sub> , F, 4 -119 APHA3114-C, 3-40 IS 3025 (Part 37)	0.1 to 50 mg/L 0.01 to 100 mg/L
       		     	APHA, 3120B, 3-42 IS 3025 (Part 2)/ ISO 11885	0.005 to 100 mg/L
		Bicarbonate	APHA2320-B, 2-37 , 5 -4 & 4500-CO <sub>2</sub> -D,4-38 IS 3025 (Part 51)	0.5 to 5000 mg/L
   	 	Biochemical Oxygen Demand	APHA5210-B, 5-6 (5 days, 20°C)	1 to 50000 mg/L
         		         	IS 3025 (Part 44), Amds.1 (3 days, 27°C)	1 to 50000 mg/L

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	   	Cadmium	APHA3111-B, 3-20 IS 3025(Part 41)	1.1 to 100 mg/L
     	     		APHA3120B, 3-42 IS 3025 (Part 2)/ ISO 11885	0.002 to 100 mg/l
   	   	Calcium	APHA3500-B, 3-69 IS 3025 (Part 40)	0.4 to 10000 mg/L
       	       	       	APHA, 3120B, 3-42 IS 3025(Part 2)/ ISO 11885	0.5 to 10000 mg/L
   	   	Chemical Oxygen Demand	APHA5220-B, 5-18 IS 3025 (Part 58)	5 to 100000 mg/L
   	   	Chloride	APHA4500-Cl,B,4-75 IS 3025(Part 32)	0.25to10000mg/L
   	   	Chlorine Demand	APHA 2350-B, 2-52 IS 3025 (Part 25)	0.1 to 10 mg/L
   	   	Chromium (Hexa)	APHA, 3500-Cr, B, 3-71 IS 3025 (Part 52)	0.02 to 100 mg/L
   	   	Chromium (Total)	APHA3111 B,3-20 IS 3025 (Part 52)	0.1 to 1000mg/L
	       	     	APHA3120 B, 3-42 IS 3025 (Part 2)/ ISO 11885	0.02 to 1000 mg/l
   		Colour (Co- Pt)	APHA2120-B, 2-6 IS 3025 (Part 4)	1 to 700 Hazen units
   	   	Copper	APHA3111-B, 3-20 IS 3025 (Part 42)	0.04 to 1000 mg/L
	         	         	APHA3120B,3-42 IS 3025 (Part 2) / / ISO 11885	0.02 to 1000 mg/L
         		Cyanide	APHA4500-CN, C & E, 4- 44 & 4-47 IS 3025 (Part 27)	0.001 to 100 mg/L

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   	<del> </del>   	T	APHA 4500-CN, C & D, 4- 44 & 4-45	1 to 100 mg/L
     	     	Dissolved Oxygen	APHA4500-O,B & C,4-139 & 4-144 IS 3025 (Part 38)	0.05 to 15 mg/L
	   	Fluoride	APHA4500-F-, D, 4-90 IS 3025 (Part 60)	0.05 to 20 mg/L
   		Iron	APHA3111-B, 3-20 IS 3025 (Part 53)	0.08 to 1000 mg/L
			APHA3120-B,3-42 IS 3025 (Part 2)/ ISO 11885	0.06 to 1000 mg/L
     		Lead	APHA3111-B,3-20 IS 3025 (Part 47)	0.1 to 100 mg/L
       		 	APHA3120B,3-42 IS 3025 (Part 2)/ ISO 11885	0.008 to 100 mg/L
   		Magnesium	APHA3500-Mg, B, 3-86 IS 3025 (Part 46)	0.02 to 1500 mg/L
	T	Manganese	APHA3111-B, 3-20	0.05 to 100 mg/L
     	     	<del>-</del>	APHA 3120-B, 3-42 IS 3025 (Part 2)/ ISO 11885	0.02to100mg/L
		Mercury	APHA3112-B, 3-25 IS 3025 (Part 48)	0.005 to 100 mg/L
		 	IS 3025 (Part 2)/ ISO 11885	0.0008to100 mg/L
		Molybdenum	APHA3120-B, 3-42 IS 3025 (Part 2)/ ISO 11885	0.002 to 100 mg/L
		Nickel	APHA3111-B, 3-20 IS 3025 (Part 54)	0.06 to 100 mg/L

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			APHA3120-B, 3-42 IS 3025 (Part 2)/ ISO 11885	0.01to100 mg/L
		Nitrate	APHA 4500-NO <sub>3</sub> B-4-127	0.2to1000 mg NO <sub>3</sub> /L
   	 	 	US EPA Method no.352.1,1971	0.1to1000 mg NO <sub>3</sub> /L
   		pH	APHA4500-H <sup>+</sup> -B, 4-95 IS 3025 (Part 11)	1 to 14
		Oxygen absorbed in 4 hours at 37°C (Permanganate value)	IS 3025 (Part 63)	0.1 to 50 mg/L
		Odour	IS 3025 (Part -5)	Qualitative (Agreeable/ Not agreeable)
		Oil & Grease	APHA5520-B, 5-42 IS 3025 (Part 39)	1 to 1000 mg/L
   		Potassium	APHA3500-K, B, 3-89 IS 3025 (Part 45)	0.06to1000 mg/L
			APHA 3120-B,3-42 IS 3025 (Part 2)/ ISO 11885	0.5 to 1000 mg/L
     		Phenolic Compound/ Phenol	APHA5530- B, 5-49 & C,5- 50 IS 3025 (Part 43)	0.001 to 100 mg/L
   		Phosphate (Total, Ortho & Dissolved)	APHA 4500 P, E, 4-164	0.1 to 500 mg/L
		Free Residual Chlorine	APHA4500-Cl-B,4-63 IS 3025 (Part 26)	0.1to 100 mg/L
			APHA4500-CI-G, 4-72	0.05to1mg/L
   		Sludge volume index (SVI)	APHA2710-D,2-94	1to 500
		Sodium	APHA3500-Na, B, 3-99 IS 3025 (Part 45)	0.2 to 1000 mg/L

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		 	APHA3120B, 3-42 IS 3025 (Part 2) / ISO11885	0.5 to 1000 mg/L
		Sodium Adsorption Ratio	IS11624	0.3 to30
     		Sulphide	APHA4500 –S <sup>2</sup> , C-4-183, F-4-187 IS 3025 (Part 29)	0.08 to 50 mg/L
   		Sulphate	APHA4500- SO <sub>4</sub> , E,4-199 IS 3025 (Part 24)	2 to 10000 mg/L
		Total Kjeldahl Nitrogen	APHA4500 NH <sub>3</sub> , B & C, 4 - 114, 4-116 or F, 4 -119& 4500 NOrg, , B, 4-139	0.1 to 10000 mg/L
     	     	Total Dissolved Solids/ Filterable Residues	APHA2540 C, 2-69 IS 3025 (Part 16)	5 to 10000 mg/L
     		Total Solids /Total Residues/ Residue on Evaporation	APHA2540-B,2-68 IS 3025 (Part 15)	5 to 10000 mg/L
   	<del> </del>   	Total Suspended Solids	APHA2540 - D, 2-70 IS 3025 (Part 17)	5 to 10000 mg/L
		Total Volatile Solids	APHA 2540-E, 2-71 IS 3025 (Part 18)	5 to 10000 mg/L
		Temperature	APHA2550-B, 2-74 IS 3025 (Part 9)	0to100 °C
   		Total Hardness	APHA2340 C, 2-48 IS 3025 (Part 21)	0.5 to 10000 mg/L
F		Turbidity	IS 3025 (Part 10)	0.1 to 1000 NTU
	   	Zinc	APHA3111-B, 3-20 IS 3025 (Part 49)	0.01 to 1000 mg/L
		       	APHA3120B, 3-42 IS 3025 (Part 2)/ ISO 11885	0.05 to 1000 mg/L

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	<u> </u>	Boron	APHA 4500-B -C, 4-29	1 to 100 mg/L
     	†		APHA 4500-B, 4-27 Annex H of IS 13428	0.1 to 100 mg/L
			IS 3025 (Part 57)   APHA3120B, 3-42   IS 3025(Part 2)/   ISO 11885	0.1 to 100 mg/L
     		Vanadium	APHA3120B, 3-42 IS 3025 (Part 2)/ ISO 11885	0.01to10 mg/L
   		Selenium (as Se)	APHA3114-C, 3-40 IS 3025 (Part 56)	0.01 to 100 mg/L
	     		APHA 3120-B, 3-42 IS 3025 (Part 2)/ ISO 11885:1996	0.005 to 100 mg/L
		Electrical conductivity	APHA2510 B,   2-58   IS 3025 (Part 14)	1 to 100000 µS/cm or µmhos/cm
   		Anionic Detergents	APHA5540-B&C5-51 & 5- 53	0.1 to 50 mg/L
   	     	Free Ammonia	APHA4500-NH <sub>3</sub> , B&C, 4- 110, 4-112	0.1 to 1000 mg/L
   	Residues in Waste water	Polynuclear aromatic hydrocarbons (as PAH)	APHA6440, 6-94 AEC/C/SAP/INS/6-7, Issue	0.0032 μg/lto 50 mg/L
		Naphthalene	No.04, Issue Date:	0.0002 μg/l to 50 mg/L
	 	Acenaphthylene	01.04.2018	0.0002µg/Lto 50 mg/L
L	 	Acenaphthene		0.0002µg/lLto50 mg/L
L	 	Fluorene	ı L	0.0002µg/Lto 50 mg/L
<u> </u>	 <del> </del>	Phenanthrene	 	0.0002µg/Lto 50 mg/L
<u> </u>	 <del> </del>	Anthracene	 	0.0002µg/Lto 50 mg/L
Ļ	<u> </u>	Fluoranthene	ı 	0.0002µg/Lto 50 mg/L
<u> </u>	<del> </del>	Pyrene	 	0.0002µg/Lto 50 mg/L
L	<u> </u>	Benzo(a)anthracene	L	0.0002µg/Lto 50 mg/L

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	T	Chrysene		0.0002µg/Lto 50 mg/L
F	T	Benzo(b)fluoranthene		0.0002µg/Lto 50 mg/L
F	<u> </u>	Benzo(k)fluoranthene		0.0002µg/Lto 50 mg/L
F	† <del>`</del>	Benzo(a)pyrene		0.0002µg/Lto 50 mg/L
F	<u> </u>	Indeno (1,2,3,c,d) pyrene		0.0002µg/Lto 50 mg/L
	<u> </u>	Dibenzo(a,h)anthracene		0.0002µg/Lto 50 mg/L
	<u> </u>	Benzo(g,h,i)perylene		0.0002µg/Lto 50 mg/L
   	   	Polychlorinated biphenyls (PCB)	AEC/C/SAP/INS/6-6, Issue No.04, Issue Date:	0.0038µg/Lto 50 mg/L
ļ		2 Chlorobiphenyl	01.04.2018	0.0002µg/Lto 50 mg/L
	<del> </del>	2,3 Dichlorobiphenyl		0.0002µg/Lto 50 mg/L
	<del> </del>	2,2',5- Trichlorobiphenyl	Annex M of IS	0.0002µg/Lto 50 mg/L
F	<u> </u>	2,4',5- Trichlorobiphenyl	13428:2005,Amds.4	0.0002 μg/L to 50 mg/L
   		2,2',5,5' Tetrachlorobiphenyl	 	0.0002µg/Lto 50 mg/L
   		2,2',3,5'  Tetrachlorobiphenyl		0.0002µg/Lto 50 mg/L
	<del>                                     </del>	2,3',4,4'  Tetrachlorobiphenyl		0.0002µg/Lto 50 mg/L
   	<del>                                     </del>	2,2',4,5,5' Pentachlorobiphenyl		0.0002μg/Lto 50 mg/L
   	<del>                                     </del>	2,2',3,4,5' Pentachlorobiphenyl	 	0.0002 μg/L to 50 mg/L
	T	2,3,3',4',6 Pentachlorobiphenyl		0.0002µg/Lto 50 mg/L
	   	2,2',3,5,5',6 Hexachlorobiphenyl	   	0.0002µg/Lto 50 mg/L
	<del> </del>	2,2',4,4',5,5' Hexachlorobiphenyl	   	0.0002µg/Lto 50 mg/L
   		2,2',3,4,5,5' Hexachlorobiphenyl	   	0.0002µg/Lto 50 mg/L
   	   	2,2',3,4,4',5' Hexachlorobiphenyl		0.0002µg/Lto 50 mg/L

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   		2,2',3,4',5,5',6 Heptachlorobiphenyl		0.0002μg/Lto 50 mg/L
   	   	2,2',3,4,4',5',6 Heptachlorobiphenyl	   	0.0002μg/Lto 50 mg/L
   	   	2,2',3,4,4',5,5' Heptachlorobiphenyl		0.0002µg/Lto 50 mg/L
		2,2',3,3',4,4',5 Heptachlorobiphenyl	   	0.0002μg/Lto 50 mg/L
	   	2,2',3,3',4,4',5,5',6 Nonachlorobiphenyl		0.0002μg/Lto 50 mg/L
   	   	Pesticide Residues p,p DDT	US EPA 508	0.05µg/Lto 100 mg/L
			US EPA 525.2 APHA6410-B, 6-7	0.01µg/Lto 100 mg/L
		o,p DDT	US EPA 508	0.05µg/Lto 100 mg/L
   	 	 	US EPA 525.2 APHA6410B, 6-74	0.01µg/Lto 100 mg/L
L	<u> </u>	p,p DDE	US EPA 508	0.05µg/Lto 100 mg/L
   	 	 	US EPA 525.2 APHA6410B, 6-74	0.01µg/Lto 100 mg/L
 	 	o,p DDE	US EPA 508	0.05µg/L to100 mg/L
	 	 	US EPA 525.2 APHA, 6410B, 6-74	0.01µg/Lto 100 mg/L
 	 	p,p DDD	US EPA 508	0.05µg/L to100 mg/L
   	 	 	US EPA 525.2, 1995 APHA6410B, 6-74	0.01µg/Lto 100 mg/L
		o,p DDD	US EPA 508	0.05µg/Lto 100 mg/L
			US EPA 525.2 APHA 6410B, 6-74	0.01µg/Lto 100 mg/L
	 	Gamma HCH (Lindane)	US EPA 508	0.05µg/Lto 100 mg/L
			US EPA 525.2 APHA6410B, 6-74	0.01μg/Lto 100 mg/L

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F	T	Alfa HCH	US EPA 508	0.05µg/L to100 mg/L
<u> </u>	<del> </del>	<u> </u>	US EPA 525.2	0.01µg/Lto 100 mg/L
İ	l I	İ	APHA, 6410-B, 6-74	
F	<u> </u>	Beta HCH	US EPA 508	0.025µg/L to 100 mg/L
F	<u> </u>	T	US EPA 525.2	0.01µg/Lto 100 mg/L
i	İ	İ	│ APHA6410B, 6-74	
F	T	Delta HCH	US EPA 508	0.05µg/L to 100 mg/L
		T	US EPA 525.2	0.01 μg/L to 100 mg/L
į	ļ	İ	APHA6410B, 6-74	
	T	Alfa Endosulfan	US EPA 508	0.05µg/Lto 100 mg/L
		T	US EPA 525.2	0.01µg/Lto 100 mg/L
<u>i</u>	<u>i</u>	<u>i</u>	APHA, 6410B, 6-74	
		Beta Endosulfan	US EPA 508	0.05µg/L to 100 mg/L
F			US EPA 525.2	0.01µg/Lto 100 mg/L
Ĺ	<u>i</u>	<u>i.                                    </u>	APHA6410B, 6-74	
L	 	EndosulfanSulphate	US EPA 508	0.05µg/Lto 100 mg/L
	 		US EPA 525.2	0.01µg/Lto 100 mg/L
<u>L</u>	<u>i</u>	<u>i</u>	APHA6410B, 6-74	
L	 	Monocrotophos	US EPA 8141A, Rev1,	0.07μg/Lto 100 mg/L
	] 	}	US EPA 525.2	0.05µg/Lto 100 mg/L
<u>L</u>	<u>i</u>	<u>i</u>	APHA6410B, 6-74	
	] 	Ethion	US EPA 8141A, Rev1	0.07µg/L to 100 mg/L
<u>i</u>	<u>i</u>	<u> </u>	US EPA 1657A	
1	] ]		US EPA 525.2,	0.05µg/Lto 100 mg/L
<u> </u>	<u>i</u>	<u> </u>	APHA6410B, 6-74	
 	 <del> </del>	Chlorpyriphos	US EPA 8141A, Rev1,	0.07µg/L to100 mg/L
l	 		US EPA 525.2	0.05µg/Lto 100mg/L
Ĺ	<u> </u>	<u> </u>	APHA6410B, 6-74	
L	 <del> </del>	Phorate Phorate	US EPA 8141A, Rev1,	0.07μg/Lto 100 mg/L
1	 	Phoratesulphoxide	US EPA 8141A, Rev1,	0.07µg/Lto 100 mg/L
Ĺ	<u> </u>	<u> </u>	September 1994	
	1		US EPA 525.2	0.05µg/Lto 100 mg/L
<u>L</u>	<u> </u>	<u> </u>	APHA6410B, 6-74	

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     	 	Phoratesulphone	US EPA 8141A, Rev1, September 1994	0.07 μg/Lto 100 mg/L
			US EPA 525.2,1995 APHA, 23 <sup>rd</sup> Ed., 2017, 6410B, 6-74	0.05μg/Lto 100 mg/L
F	<del> </del>	2,4-D	US EPA 515.1	0.07µg/Lto 100 mg/L
F	<del> </del>	Butachlor	US EPA 508	0.07µg/Lto 100 mg/L
	   	†	US EPA 525.2 APHA6410B, 6-74	0.01µg/Lto 100 mg/L
	<u> </u>	Isoproturon	US EPA 532	0.07μg/Lto 100 mg/L
	T	Alachlor	US EPA 508	0.07µg/Lto 100 mg/L
   	 		US EPA 525.2 APHA6410B, 6-74	0.01µg/Lto 100 mg/L
		Atrazine	US EPA 8141A, Rev1	0.07 μg/Lto 100 mg/L
	<del> </del>   	†   	US EPA 525.2 APHA6410B, 6-74	0.01µg/Lto 100 mg/L
		Methyl Parathion	US EPA 8141A, Rev 1,	0.07μg/Lto 100 mg/L
   		<del> </del>	US EPA 525.2 APHA6410B, 6-74	0.05µg/Lto 100 mg/L
	T	Methyl Paraoxon	US EPA 8141A, Rev 1,	0.07μg/Lto 100 mg/L
   	   	   	US EPA 525.2 APHA 6410B, 6-74	0.05µg/Lto 100 mg/L
   		Malathion	US EPA 8141A, Rev1, September 1994	0.07µg/Lto 100 mg/L
   	<del> </del>   	†   	US EPA 525.2, 1995 APHA6410B, 6-74	0.05µg/Lto 100 mg/L
	T	Malaoxon	US EPA 8141A, Rev 1,	0.07μg/Lto 100 mg/L
 		T	US EPA 525.2 APHA6410B, 6-74	0.05µg/Lto 100 mg/L
	T	Aldrin	US EPA 508	0.025µg/Lto 100 mg/L
	     	 	US EPA 525.2 APHA6410B, 6-74	0.01μg/Lto 100 mg/L

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	T	Dieldrin	US EPA 508	0.025µg/Lto 100 mg/L
	     	T	US EPA 525.2,1995 APHA, 23 <sup>rd</sup> Ed., 2017, 6410B, 6-74	0.01µg/Lto 100 mg/L
2.	Solid Waste, Hazardous Waste, Toxic Waste, Municipal Solid Waste & Incinerator Ash	pH	CPCB Manual LATS/16/2003-2004,Ch. 7,7.4,Page no.167 AEC/C/SAP/SW/HW-2, Issue no.:4, Issue date: 01.04.2018 IS 10158 USEPA/SW 846 /9045 D,	1 to 14
		Electrical Conductivity	USEPA Method no.120.1	1 to 20 mS/cm
	 	Solids 	CPCB Manual LATS/16/, Ch.4, 4.7.1,Page no.34 AEC/C/SAP/SW/HW-04, Issue no.:4, Issue date: 01.04.2018	1 to 100 % by mass
		Water content	CPCB Manual LATS/ 16/Ch.4, 4.7.3,Page no.35 AEC/C/SAP/SW/HW-05, Issue no.:4, Issue date: 01.04.2018	0.1 to 50 % by mass
		Loss on Drying/Dry Substances/ Moisture	CPCB Manual LATS/16 ,Ch. 4, 4.7.2,Page no. 34 AEC/C/SAP/SW/HW-06 Issue no.:4, Issue date: 01.04.2018 IS 9235:1979, RA 2009 Ed. 1.1,Amds.1	1 to 100 % by mass
	 	Loss on Ignition /Total Organic Matter/ Volatile Substances/ Organic Content	IS 10158	1 to 90 % by mass

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ļ	<del> </del>	Non Volatile Substances	IS 10158	0.1 to 90 % by mass
ļ·	<del> </del>	Kjeldhal Nitrogen	IS 10158	50 to 5000 mg/kg
i	l I			0.5 to 5 % by mass
	<u> </u>	Potassium	IS 10158	10 to 1000 mg/kg
	<u> </u>	Chloride	USEPA/SW 846/ 9253,	50 to 5000 mg/kg
	T	Phosphorous	IS 10158	10 to 1000 mg/kg
	T	Calorific Value (Gross	IS 10158	200 to 15000 kcal/kg
Ĺ	<u> </u>	Calorific Value )	IS 1350(Part II)	<u> </u>
		Flash Point /Ignitability	CPCB Manual	Ignitable /Non-ignitable
į	į	į	LATS/16/Ch.7, 7.2, Page	25 <sup>0</sup> to 250 <sup>0</sup> C
	 		no.166	
		!	AEC/C/SAP/SW/HW-14,	
ļ	ļ	İ	Issue no.4, Issue date:	
 	 <del> </del>	 <del> </del>	01.04.2018	 
ļ	ļ	Sulphate	USEPA/SW 846/ 9038,Rev	50 to 5000 mg/kg
<u> </u>	<del> </del>		0,Sept 1986	
į	į	Oil & Grease (n-Hexane	USEPA/SW 846/ 9071B,	1 to 1000 mg/kg
<u></u>	 <del> </del>	Extractable Matter)	Rev 2Apr 1998	
į	į	Cyanide	CPCB Manual, Chapter	0.01 to 5 mg/kg
	 		No.5.15, Page No.102 AEC/C/SAP/SW/HW- 22,	 
Ì	į I		Issue no.4, Issue date:	İ
ļ	İ	İ	01.04.2018	
<u> </u>	<del> </del>	Phenolic Compound	CPCB Manual, Chapter	0.001 to 100 mg/kg
		(C <sub>6</sub> H <sub>5</sub> OH)	No.6.8,Page No.138	0.001 to 100 mg/kg
ļ	ļ	(30113011)	AEC/C/SAP/SW/HW- 23,	
1	 	+	Issue no.4, Issue date:	
į	İ	1	01.04.2018	į
ļ	<u> </u>	Total Metals		
ļ	<del> </del>	Aluminum	USEPA/SW 846/6010 C,	1 to 2000 mg/kg
	<del> </del>   	Antimony	USEPA/SW846/7062, 7000B	0.2 to 100 mg/kg
		   	USEPA /SW 846/ 6010 C, Rev 3, Feb 2007	0.1 to 100 mg/kg

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:==:		Arsenic	CPCB Manual LATS/16,Ch.5,5.6,Page no. 56 AEC/C/SAP/INS/4-29, Issue no.4, Issue date: 01.04.2018 USEPA/SW846/7062& 7000B	0.1 to 500 mg/kg
	     	<del> </del>	USEPA Method no.200.7, USEPA/SW 846/ 6010 C,	0.01 to 500 mg/kg
	<del> </del>	Barium	USEPA/SW 846/ 6010 C, USEPA/SW 846/ 6010 C,	10 to 25000 mg/kg 5 to 5000 mg/kg
	               	Cadmium	CPCB Manual LATS/16, Ch.5,5.4, Page no. 42, AEC/C/SAP/INS/4-32 Issue no.4, Issue date: 01.04.2018 USEPA/SW846/7000B,	5 to 500 mg/kg
			USEPA, Method no. 2007, USEPA/SW 846/ 6010 C,	0.1 to 500 mg/kg
	<del> </del>	Calcium	USEPA, Method no. 200.7,	10 to 5000 mg/kg
		Chromium	CPCB Manual LATS/16/ 2003-2004, Ch.5, 5.4, Page no. 42 AEC/C/SAP/INS/4-32 Issue no.4, Issue date: 01.04.2018 USEPA/SW 846/7000B,	5 to 500 mg/kg
	       		USEPA Method no. 200.7, Rev.4.4,1994 USEPA/SW 846/ 6010 C,	1 to 500 mg/kg
	<del> </del>	Chromium (Hexavalent)	USEPA/SW 846/7196 A,	10 to 500 mg/kg
	<del> </del>	Cobalt	USEPA/SW 846/ 6010 C,	0.5 to 10000 mg/kg
	<del> </del>	Copper	CPCB Manual LATS/16,	2 to 10000 mg/kg

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         			Ch.5,5.4, Page no. 42 AEC/C/SAP/INS/4-32 Issue no.4, Issue date:01.04.2018 USEPA/SW 846/7000B,	
			USEPA, Method no. 200.7, USEPA/SW 846/6010 C,	1.0 to 10000 mg/kg
           		Iron	CPCB Manual LATS/16/, Ch.5,5.4, Page no. 42 AEC/C/SAP/INS/4-32, Issue no.4, Issue date: 01.04.2018 USEPA/SW846/7000B, Re	3.0 to 10000 mg/kg
   !		   	USEPA, Method no.200.7, USEPA/SW 846/6010 C,	1.0 to 10000 mg/kg
		Lead	CPCB Manual LATS/16, Ch.5, 5.4, Page no. 42 AEC/C/SAP/INS/4-32, Issue no.4, Issue date: 01.04.2018 USEPA/SW 846/7000B, Rev 2, Feb 2007	1.0 to 10000 mg/kg
   			USEPA, Method no. 200.7, USEPA /SW 846/ 6010 C,	0.5 to 10000 mg/kg
	T	Magnesium	USEPA, Method no. 200.7,	10 to 5000 mg/kg
   	<del> </del>	Manganese	USEPA, Method no. 200.7, USEPA/SW 846/ 6010 C,	1 to 10000 mg/kg
		Mercury	CPCB Manual LATS/16/, Ch.5, 5.7, Page no. 62 AEC/C/SAP/INS/4-31, Issue no. 4, Issue date: 01.04.2018 USEPA/SW846/7471 A,	0.04 to 1000 mg/kg
	 	T	USEPA, Method no. 200.7, USEPA/SW 846/ 6010 C,	0.01 to 1000 mg/kg
		Molybdenum	USEPA/SW 846/ 6010 C,	1.0 to 10000 mg/kg

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		Nickel	CPCB Manual LATS/16, Ch.5,5.4,Page no. 42 AEC/C/SAP/INS/4-32, Issue no.4, Issue date: 01.04.2018 USEPA/SW 846/7000B,	3 to 10000 mg/kg
   	 	 	USEPA, Method no. 200.7, USEPA/SW 846/6010 C,	2.5 to 10000 mg/kg
 	 	Potassium	USEPA/SW 846/7000B,	3 to 1000 mg/kg
   			USEPA, Method no. 200.7, USEPA/SW 846/6010 C,	3 to 1000 mg/kg
		Selenium	CPCB Manual LATS/16, Ch.5,5.6,Page no. 56 AEC/C/SAP/INS/4-57, Issue no.4, Issue date: 01.04.2018 USEPA/SW 846/7742, &	2 to 100 mg/kg
   	   	 	7000B, USEPA, Method no. 200.7, USEPA/SW 846/6010 C,	0.5 to 100 mg/kg
               		Silver	CPCB Manual LATS/16, Ch.5,5.4,Page no. 42 AEC/C/SAP/INS/4-32, Issue no.4, Issue date: 01.04.2018 USEPA/SW 846/7000B,	2 to 10000 mg/kg
   	<del>                                     </del>	<del> </del>	US EPA, Method no. 200.7, USEPA/SW 846/6010 C,	0.5 to 10000 mg/kg
<u> </u>	<del> </del>	Sodium	USEPA/SW 846/7000B,	3 to 10000 mg/kg
   	<del> </del>   	†   	USEPA, Method no. 200.7, USEPA/SW 846/6010 C,	3 to 10000 mg/kg
	<u> </u>	Tin	USEPA/SW 846/6010 C,	1 to 1000 mg/kg
	T	Vanadium	USEPA/SW 846/6010 C,	1 to 10000 mg/kg
L		Zinc	CPCB Manual LATS/16,	2.5 to 1000 mg/kg

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		             	Ch.5,5.4,Page no.42 AEC/C/SAP/INS/4-32, Issue no.4, Issue date: 01.04.2018 USEPA/SW 846/7000B,	
   	   	   	USEPA, Method no.200.7, USEPA/SW 846/6010 C,	2.5 to 1000 mg/kg
		Metals by Toxicity Characteristic Leaching Procedure (TCLP) or Soluble Threshold Limit Concentration (STLC)		
		Arsenic	CPCB Manual LATS/16, Ch.5, 5.6, Page no. 56 & 170 AEC/C/SAP/INS/4-33, Issue no.4, Issue date: 01.04.2018. USEPA/SW 846/1311 & 7062 & 7000B,	0.1 to 100 mg/L
           		†	USEPA, Method no. 200.7 & 1311 USEPA /SW 846/6010 C & 1311	0.1 to 100 mg/L
		Cadmium	CPCB Manual LATS/16, Ch.5, 5.4, Page no. 42 & 170 AEC/C/SAP/INS/4-33, Issue no.4, Issue date: 01.04.2018 USEPA/SW 846/1311 & 7000B	0.1 to 200 mg/L
     	   	†	USEPA, Method no. 200.7, & 1311, RevUSEPA/SW	0.1 to 200 mg/L

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	Ţ	Ţ	846/ 6010 C & 1311	
         	           	Total Chromium	CPCB Manual LATS/16, Ch.5, 5.4, Page no. 42 &170 AEC/C/SAP/INS/4-33,	0.1 to 1000 mg/L
	 	 	Issue no.4, Issue date: 01.04.2018 USEPA/SW 846/1311 &7000 B	
	 	       	USEPA, Method no. 200.7, & 1311, USEPA/SW 846/6010 C <sub>7</sub> & 1311	0.1 to 1000 mg/L
		Chromium (Hexavalent)	USEPA/SW 846/7196 A,	0.2 to 1000 mg/L
		Iron	CPCB Manual LATS/16, Ch.5, 5.4, Page no. 42 & 170 AEC/C/SAP/INS/4-33, Issue no.4, Issue date: 01.04.2018 USEPA/SW 846/1311, & 7000B,	0.5 to 1000 mg/L
       			USEPA, Method no. 200.7, & 1311 USEPA/SW 846/6010 C, & 1311	0.1 to 1000 mg/L
		Lead	CPCB Manual LATS/16, Ch.5, 5.4, Page no. 42 &170 AEC/C/SAP/INS/4-33, Issue no.4, Issue date: 01.04.2018 USEPA/SW 846/1311 & 7000B	0.1 to 100 mg/L

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	T	 	USEPA, Method no. 200.7,& 1311 USEPA/SW 846/ 6010 C & 1311	0.1 to 1000 mg/L
		Nickel	CPCB Manual LATS/16, Ch.5, 5.4, Page no.42 &170 AEC/C/SAP/INS/4-33, Issue no.4, Issue date: 01.04.2018 USEPA/SW 846/1311 & 7000B	1 to 1000 mg/L
			USEPA, Method no. 200.7, & 1311 USEPA/SW 846/ 6010 C, & 1311	0.1 to 1000 mg/L
		Selenium	CPCB Manual LATS/16, Ch.5,5.6,Page no.56 &170 AEC/C/SAP/INS/4-33, Issue no.4, Issue date: 01.04.2018 USEPA/SW 846/1311 & 7742	0.1 to 100 mg/L
		     	USEPA, Method no. 200.7, & 1311 USEPA/SW 846/ 6010 C & 1311,	0.1 to 100 mg/L
		Silver	CPCB Manual LATS/16, Ch.5, 5.4, Page no. 42 & 170 AEC/C/SAP/INS/4-33 Issue no.4, Issue date: 01.04.2018 USEPA/SW 846/1311 & 7000B	0.5 to 500 mg/L
	<del> </del>	<del> </del>     	USEPA, Method no. 200.7, & 1311	0.1 to 500 mg/L

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   	   	T	USEPA/SW 846/ 6010 C, & 1311	     
	         	Barium	USEPA, Method no. 200.7, & 1311 USEPA/SW 846/6010 C, /200.8 & 1311	10 to 1000 mg/L
		Mercury	CPCB Manual LATS/16, Ch.5, 5.7,Page no. 62 AEC/C/SAP/INS/4-33 Issue no.4, Issue date: 01.04.2018 USEPA/SW 846/1311, &7471 B,	0.04 to 50 mg/L
	 		USEPA, Method no. 200.7, & 1311 USEPA/SW 846/ 6010 C, & 1311,	0.01 to 50 mg/L
		Zinc	CPCB Manual LATS/16, Ch.5,5.4, Page no. 42 & 170 AEC/C/SAP/INS/4-33, Issue no.4, Issue date: 01.04.2018 USEPA/SW 846/1311 &7000B,	1 to 1000 mg/L
       	†	†	USEPA, Method no. 200.7, USEPA/SW 846/6010 C &1311	0.1 to 1000 mg/L
	   	Manganese	USEPA, Method no. 200.7, USEPA/SW 846/ 6010 C,	1 to 1000 mg/l
	   	Antimony	USEPA/SW 846/7062, & 7000 B	0.2 to 100 mg/l
 		Beryllium	USEPA/SW 846/ 6010 C,	1 to 100 mg/L
L	<u> </u>	Cobalt	USEPA/SW 846/ 6010 C,	0.5 to 10000 mg/L

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	T		Rev 3,Feb 2007	
	T	Copper	CPCB Manual LATS/16,	2 to 1000 mg/L
	ļ		Ch.5, 5.4, Page no. 42	
			AEC/C/SAP/INS/4-32,	 
			Issue no.4, Issue date:	
			01.04.2018.	
	 <del> </del>	<u> </u>	USEPA/SW 846/7000B,	<u> </u>
	 <del> </del>	Molybdenum	USEPA/SW 846/6010 C,	1.0 to 1000 mg/L
	 <del> </del>	Vanadium	USEPA/SW 846/6010 C,	1 to 1000 mg/L
	 <b> </b>	<u>  Tin</u>	USEPA/SW 846/6010 C,	1 to 1000 mg/L
3.	Used Oil / Waste	Sediments	IS 1866 (Annexure A)	0.1 to 40 %
	Oil	Lead	CPCB Manual LATS/16,	0.5 to 200 mg/kg (ppm)
			Ch.5, 5.4, Page no.42	
			AEC/C/SAP/INS/4-34,	 
			Issue no.4, Issue date:	
			01.04.2018	
	 <del> </del>	 +	USEPA/SW 846/7000B,	
			USEPA, Method no. 200.7,	0.1 to 200 mg/kg (ppm)
	<del> </del>	<u>+</u>	USEPA/SW 846/6010 C,	
		Arsenic	CPCB Manual LATS/16,	0.5 to 100 mg/kg (ppm)
			Ch.5, 5.6, Page no.56	
			AEC/C/SAP/INS/4-34,	
			Issue no.4, Issue date:	 
	į		01.04.2018	İ
			USEPA/SW 846/7062 &	 
	<del></del>	<u> </u>	7000B,	
	 	 	USEPA, Method no. 200.7, USEPA/SW 846/ 6010 C,	0.1 to 100 mg/kg (ppm)
		Cadmium	CPCB Manual LATS/16,	0.5 to 1000 mg/kg(ppm)
	į		Ch.5, 5.4, Page no. 42	
			AEC/C/SAP/INS/4-34,	 
			Issue no.4, Issue date:	
			01.04.2018	 
	<u> </u>	<u> </u>	USEPA/SW 846/ 7000B,	

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   	T	   	USEPA, Method no. 200.7, USEPA/SW 846/ 6010 C,	0.1 to 1000 mg/kg(ppm)
		Chromium	CPCB Manual LATS/16, Ch.5, 5.4, Page no. 42 AEC/C/SAP/INS/4-34, Issue no.4, Issue date: 01.04.2018 USEPA/SW 846/7000B,	0.5 to 1000 mg/kg(ppm)
 			USEPA, Method no. 200.7, USEPA/SW 846/6010 C,	0.1 to 1000 mg/kg(ppm)
		Nickel	CPCB Manual LATS/16, Ch.5, 5.4, Page no. 42 AEC/C/SAP/INS/4-34, Issue no.4, Issue date: 01.04.2018 USEPA/SW 846/7000B,	0.5 to 1000 mg/kg(ppm)
   	<del> </del>   	†   	USEPA, Method no. 200.7, USEPA/SW 846/6010 C,	0.1 to 1000 mg/kg(ppm)
   	 	Poly aromatic Hydrocarbons	USEPA/SW 846/ 8100,	0.00002 % to 7 %
	<del> </del>	Total Halogens	USEPA/SW 846/ 9253 /5050	50to50000 mg/kg(ppm)
	<del> </del>	Polychlorinated Biphenyls	USEPA/SW 846/8082	1.0 to 100 mg/kg (ppm)
		Sulphur	IS 1448 (Part 33):1991, RA 2008	50to10000 mg/kg 1% to 5 %
		Water Content	IS 1448 (Part 40):1987, RA 2006	1 to 10 %
4.	Soil / Sediment	pH	FAO 1976, Sec. III,1, Page no.65	1 to 14
		Particle Size Distribution (Texture)	AEC/C/SAP/S-3 Issue no. 04, Issue date: 01.04.2018, based on (Hydrometer Method)	1 to 100 %
   	   	Moisture Content	AEC/C/SAP/S-2, Issue no.04, Issue date:	0.5 to 50 g/100g

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			01.04.2018, based on Dept. of Agriculture & Cooperation, Ministry of Agriculture, Govt. of India, Jan 2011	
   	   	Organic Carbon	FAO 1976, Sec. III, 3, Page no.73	0.025 to 50 g/100g
   		Total Nitrogen	FAO 1976, Sec. III, 4, Page no.78	20 to 20000 mg/kg
   	   	Calcium Carbonate	FAO 1976, Sec. III, 2-2, Page no.71	5 to 10000 mg/kg
		Chloride	AEC/C/SAP/S-7 Issue no. 04, Issue date:01.04.2018 based on Ref. WLII, Sec. B2, Page no.32	50 to 5000 mg/kg
   		Available Nitrogen	FAO 1976, Sec. III, 11, Page no.145	20 to 10000 mg/kg 50 to 25000 kg/ha
   		Available Phosphorous	FAO 1976, Sec. III, 12-1, Page no.157	5 to 5000 mg/kg 10 to 500 kg/ha
   		Exchangeable (Available) Potassium	FAO 1976, Sec. III, 8-1, Page no.115	1 to 10000 mg/kg 20 to 2000 kg/ha
		Total Phosphorus (Phosphate)	FAO Page No.157 AEC/C/SAP/S-16, Issue no. 04, Issue date:01.04.2018	10 to 5000 mg/kg
		Available Boron	AEC/C/SAP/S-28, Issue no. 04, Issue date: 01.04.2018	0.2 to 10 mg/kg (ppm) >10 mg/kg (ppm)
		Hexavalent Chromium	USEPA Method-7196A	10 to 100 mg/kg 100 to 1000 mg/kg >1000 mg/kg
		Oil & Grease (Hexane Extractable Matter)	USEPA/SW 846/ 9071B, Rev 2, Apr 1998	5 to 100 mg/kg >100 mg/kg

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   	<del> </del>	Exchangeable (Available)  Magnesium	FAO 1976, Sec. III, 8-1, Page no.115	10 to 10000 mg/kg
   		Exchangeable (Available) Calcium	FAO 1976, Sec. III, 8-1, Page no.115	10 to 10000 mg/kg
   	   	Exchangeable (Available) Sodium	FAO 1976, Sec. III, 8-1, Page no.115	1 to 10000 mg/kg
   	   	Electrical Conductivity	FAO 1976, Sec. III, 5, Page no. 85	0.05 to 10 mmhos/cm
		Available Zinc	AEC/C/SAP/INS/4-42, Issue no: 04, Issue date: 01.04.2018, based on Dept. of Agriculture & Cooperation, Ministry of Agriculture, Govt. of India, Jan 2011,Chapter 4, Page no. 106	0.2 to 1000 mg/kg
		Available Iron	AEC/C/SAP/INS/4-42, Issue no: 04, Issue date: 01.04.2018, based on Dept.of Agriculture & Cooperation, Ministry of Agriculture, Govt.of India, Jan 2011,Chapter 4, Page no. 106	0.2 to 1000 mg/kg
		Available Copper	AEC/C/SAP/INS/4-42, Issue no: 04, Issue date: 01.04.2018, based on Dept.of Agriculture & Cooperation, Ministry of Agriculture, Govt.of India, Jan 2011,Chapter 4,Page no. 106	0.2 to 1000 mg/kg

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		Available Manganese	AEC/C/SAP/INS/4-42, Issue no: 04, Issue date: 01.04.2018, based on Dept.of Agriculture & Cooperation, Ministry of Agriculture, Govt.of India, Jan 2011,Chapter 4,Page no. 106	0.2 to 1000 mg/kg
   	 	Exchangeable Sodium Percentage	ISRIC 2006, Page No.13- 58/59	1 to 50 %
	T	Sodium Absorption Ratio	ISRIC 2006, Page No.13- 58/59	1 to 60
		Cation Exchange Capacity/Ion Exchange Capacity	FAO 1976, Sec. III,7-2, Page no.104	1.0 to 80 meq/100 g
		Aluminum	USEPA/SW 846/6010 C,	1.0 to 100 mg/kg
F		Boron	USEPA/SW 846/6010 C,	5 to 100 mg/kg
           		Bulk Density	AEC/C/SAP/INS/S-27, Issue no: 04, Issue date: 01.04.2018, based on FCO Schedule III, Part D-3 Page no.144 (E)	0.1 to 3 g/cm <sup>3</sup>
		Cadmium	USEPA/SW 846/7000B,	5 to 500 mg/kg
   	   	   	USEPA, Method no. 200.7, USEPA/SW 846/6010 C,	0.1 to 500 mg/kg
	T	Chromium	USEPA/SW 846/7000B,	5 to 500 mg/kg
     	   	T	USEPA, Method no. 200.7, USEPA/SW 846/6010 C,	1.0 to 500 mg/kg
		Copper	USEPA/SW 846/7000B,	2 to 5000 mg/kg
	†   	T	USEPA, Method no. 200.7, USEPA/SW 846/ 6010 C,	1 to 5000 mg/kg
	<del> </del>	Iron	USEPA/SW 46/7000B	3 to 10000 mg/kg
			USEPA, Method no. 200.7	1 to 10000 mg/kg

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===		<del></del>	USEPA/SW 846/ 6010 C,	
		Lead	USEPA/SW 846/7000B,	1 to 1000 mg/kg
		<del> </del>	USEPA, Method no. 200.7,	0.5 to 1000 mg/kg
		1	USEPA/SW 846/6010 C,	
		Manganese	USEPA/SW 846/7000B,	2.5 to 1000 mg/kg
		<del> </del>	USEPA, Method no. 200.7,	1 to 1000 mg/kg
		İ	USEPA/SW 846/6010 C,	
		Nickel	USEPA/SW 846/ 7000B,	3 to 5000 mg/kg
		 	USEPA, Method no. 200.7, USEPA/SW 846/ 6010 C,	2.5 to 5000 mg/kg
		Potassium	USEPA/SW 846/7000B.	3 to 1000 mg/kg
		+	USEPA, Method no. 200.7,	3 to 1000 mg/kg
			USEPA/SW 846/6010 C,	o to rood mg/kg
		Sodium	USEPA/SW 846/7000B,	3 to 10000 mg/kg
		<del></del>	USEPA, Method no. 200.7,	3 to 10000 mg/kg
		I I	USEPA/SW 846/6010 C,	
		Sulphate	AEC/C/SAP/S-8, Issue no.	50 to 5000 mg/kg
			04, Issue date:01.04.2018	
			based on Ref. WLII, Sec.	
		į	B2, Page no.33	
		Water holding capacity/	AEC/C/SAP/S-18 Issue	5 to 100 %
		Water retention capacity	no.04, Issue	
		I I	ate:01.04.2018 based on	
			Analytical Agriculture	
		İ	Chemistry By S.L. Chopra	
			&J.S.Kanwar, 7.11, page	
		<del></del>	no.159	
		Zinc	USEPA/SW 846/ 7000B,	2.5 to 10000 mg/kg
			USEPA, Method no. 200.7, USEPA/SW 846/ 6010 C,	2.5 to 10000 mg/kg

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IV.	WATER	T		
1.	Potable and domestic water, Ground water, Surface water (Rivers, Lakes, Sea)	Acidity	APHA, 2310-B, 2-34 IS 3025 (Part 22)	0.5 to 500 mg/L
	Industrial water (Processed Food Industry)	Alkalinity(Total,Phenolpht halein& Methyl Orange) (as CaCO <sub>3</sub> )	APHA 2320-B, 2-37 IS 3025 (Part 23)	0.5 to 5000 mg /L
	Irrigation water /Cooling purpose water	Volume of 0.02 N NaOH required to neutralize 100 ml water sample using Phenolphthalein indicator	IS 456 IS 3025 (Part 22)	0.1 to 100 ml
	Water for Steam raising i)Boiler water ii) Feed Water iii) Condensate	Volume of 0.02 N H <sub>2</sub> SO <sub>4</sub> required to neutralize 100 ml water sample using Mixed indicator	IS 456 IS 3025 (Part 23)	0.1 to 100 ml
	Distilled / demineralized water	Aluminium (as Al)	APHA 3500-AI-B,3-63 IS 3025(Part 55)	0.025 to 100 mg/L
	Water for Swimming Pools	     	APHA 3120B,3-42 IS 3025 (Part 2)/ ISO 11885	0.01 to 100 mg/L
	Water for Construction Purpose	Ammonical Nitrogen/Ammonia (as total ammonia–N)	APHA 4500 NH <sub>3</sub> , B & C,4 - 114, 4-116, IS 3025 (Part 34)	5 to 1000 mg/L
	Water for Ice Manufacture & Ice		APHA 4500 NH <sub>3</sub> , F, 4 -119, IS 3025 (Part 34)	0.1 to 50 mg/L

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	Primary Water Quality Criteria by CPCB	Anionic detergents (as MBAS)	APHA 5540-B&C,5-53 & 5-55 Annexure K of IS 13428	0.1 to 50 mg/L
         	Water for Medicinal purpose	Antimony (as Sb)	USEPA/SW 846/7062, Sept 1994 & Manufacturer manual	0.005 to 100 mg/L
       	Water for Fermentation industry		APHA 3120-B,3-42 IS 3025 (Part 2)/ ISO 11885	0.003 to 100 mg/L
		Arsenic (as As)	APHA 3114-C, 3-40 IS 3025 (Part 37)	0.01 to 100 mg/L
       			APHA 3120B,3-42 IS 3025 (Part 2) / ISO 11885	0.005 mg/L 1 to 100 mg/L
     		Bicarbonate	APHA 2320-B, 2-37, 5 -4 & 4500-CO <sub>2</sub> -D,4-38 IS 3025 (Part 51)	0.5 to 5000 mg/L
   		Biochemical Oxygen Demand	APHA 2017, 5210-B, 5-6 (5 days, 20°C)	1 to 10000 mg/L
   !	   		IS 3025 (Part 44) (3 days, 27°C)	1 to 10000 mg/L
   	   	Boron (as B)	APHA 4500-B -C,4-29 (Carmine Method)	1 to 100 mg/L
     			APHA 4500-B -B,4-27 Annex H of IS 13428 IS 3025 (Part 57):	0.1 to 100 mg/L
     	     		APHA 3120-B,3-42 IS 3025 (Part 2)/ ISO 11885	0.1 to 100 mg/L
   	<del> </del>   	Cadmium (as Cd)	APHA 3111-B, 3-20 IS 3025 (Part 41)	0.1 to 100 mg/L
	       		APHA 3120B, 3-42 IS 3025 (Part 2)/ ISO 11885	0.002 to 100 mg/L

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		Calcium (as Ca)	APHA 3500-B, 3-69 IS 3025 (Part 40)	0.4 to 1000 mg/L
		(45 04)	APHA 3120B,3-42 IS 3025 (Part 2)/ ISO 11885	0.5 to 1000 mg/L
		Carbonate	APHA 2320-B, 2-36, 5 -1 & 4500-CO <sub>2</sub> -D,4-38 IS 3025 (Part 51)	0 to 5000 mg/L
	   	Carbon dioxide (free)	APHA 4500- CO <sub>2</sub> C,4-33 IS 3025 (Part 61)	0.5 to 200 mg/L
	   	Chemical Oxygen Demand	APHA, 5220-B, 5-18 IS 3025 (Part 58)	5 to 10000 mg/L
		Colour	APHA 2120-B, 2-28 IS 3025 (Part 4)	1 to 500 Hazen units
		Colour retention of KMnO <sub>4</sub>	IS 1070, Annexure A	Qualitative Passes/Does not pass
		Chloride (as Cl)	APHA 4500-Cl, B,4-75 IS 3025 (Part 32)	0.25 to 20000 mg/L
	   	Free Residual Chlorine	APHA 4500-CI-B, 4-63 IS 3025 (Part 26)	0.1 to 100 mg/L
	<del> </del>	<u> </u>	APHA 4500-CI-G, 4-80	0.05 to 1 mg/L
	   	Chloramines (as Cl <sub>2</sub> )	APHA 4500-CI-G, 4-80	0.05 to 1 mg/L
	   	Chromium (Hexa)	APHA 3500-Cr,B, 3-71 IS 3025 (Part 52)	0.02 to 100 mg/L
	   	Chromium (Total) (as Cr)	APHA 3111 -B,3-20 IS 3025 (Part 52)	0.1 to 100 mg/L
		†	APHA 3120B,3-42 IS 3025 (Part 2)/ ISO 11885	0.02 to 100 mg/L
		Copper (as Cu)	APHA 3111-B, 3-20 IS 3025 (Part 42)	0.04 to 100 mg/L

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			APHA 3120B, 3-42 IS 3025 (Part 2)/ ISO 11885	0.02 to 100 mg/L
       	 	Cyanide (as CN)	APHA 4500-CN, C & E,4-44 & 4-46 Clause 2 of IS 3025 (Part 27)	0.001 to 1 mg/L
   		   	APHA 4500-CN, C & D,4-44 & 4-45	1 to 100 mg/L
	     	Dissolved Oxygen	APHA 4500-O,B 4-144 & C,4-146 IS 3025 (Part 38)	0.05 to 20 mg/L
     		Electrical Conductivity	APHA 2510- B, 2-58 IS 3025 (Part 14)	0.1 µmho/cm to 20000 µmho/cm
			 	0.1 µS/cm to 20000 µS/cm
     	   	Fluoride (as F)	APHA 4500-F-, D, 4-90 IS 3025 (Part 60)	0.05 to 20 mg/L
   	 	Total Hardness (as CaCO <sub>3</sub> )	APHA 2340 C, 2-48 IS 3025 (Part 21)	0.5 to 10000 mg/L
		Inorganic Solids	APHA 2540-E, 2-71 IS 3025 (Part 18)	5 to 10000 mg/L
 	<del>                                     </del>	Iron (as Fe)	IS 3025 (Part 53) APHA 3120B,3-42	0.08 to 100 mg/L 0.06 to 100 mg/L
 	   	   	IS 3025 (Part 2)/ ISO 11885	 
 		Lead (as Pb)	APHA 3111-B,3-20 IS 3025 (Part 47)	0.1 to 100 mg/L
			APHA 3120-B,3-42 IS 3025 (Part 2)/ ISO 11885	0.008 to 100 mg/L
   	T	Magnesium (as Mg)	APHA 3500-Mg,B,3-86 IS 3025 (Part 46)	0.02 to 1500 mg/L

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	 	 	APHA 3120B,3-42 IS 3025 (Part 2)/ ISO 11885	0.5 to 1500 mg/L
	   	Manganese (as Mn)	APHA 3500-Mn, B, 3-87 IS 3025 (Part 59)	0.04 to 100 mg/L
	     	     	APHA 3120B,3-42 IS 3025 (Part 2)/ ISO 11885	0.02 to 100 mg/L
	<del> </del>	<u> </u>	APHA 3111 B,3-20	0.05 to 100 mg/L
	† ! !	Mercury (as Hg)	APHA 3112-B, 3-25 IS 3025 (Part 48)	0.005 to 100 mg/L
	†   	   	IS 3025 (Part 2)/ ISO 11885	0.0008 to 100 mg/L
	<del> </del>	Mineral Oil	APHA 5520-B, 5-42	1 to 100 mg/L
	   	†   	Clause 6 of IS: 3025 (Part 39)	0.005 to 100 mg/L
	†	Molybdenum (as Mo)	APHA 3120B, 3-42 IS 3025 (Part 2) // ISO 11885	0.002 to 100 mg/L
	†     	Nickel (as Ni)	APHA 3111 B,3-20 Annex L of IS 13428 IS 3025 (Part 54)	0.06 to 100 mg/L
	†	†	APHA, 3120B,3-42 IS 3025 (Part 2)/ ISO 11885	0.01 to 100 mg/L
	<del> </del>	Nitrate (as NO <sub>3</sub> )	APHA 4500-NO3, B-4-127	0.2 to 100 mg NO <sub>3</sub> /L
	<del> </del>	<u></u>	US EPA Method no.352.1	0.1 to 100 mg NO <sub>3</sub> /L
	<del> </del>	<u> </u>	IS 3025 (Part 34)	0.05 to 100 mg NO <sub>3</sub> /L
	<del> </del>	Nitrite	APHA 4500-NO <sub>2</sub> -B,4-124	0.01 to 100 mg/L
		(as NO <sub>2</sub> )	IS 3025 (Part 34)	
	   	Odour	IS 3025 (Part 5)	Agreeable/ Not agreeable

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   	   	Oil & Grease	APHA 5520-B, 5-42 IS 3025 (Part 39)	1 to 1000 mg/L
   	 	Organic Solids	APHA 2540-E,2-71 IS 3025 (Part 18)	5 to 10000 mg/L
       		Oxygen absorbed in 4 hours at 37°C (Permanganate value)	IS 3025 (Part 63):2007 RA 2013	0.1 to 50 mg/L
   	 	pH value	APHA 4500-H+- B, 4-95 IS 3025 (Part 11)	1 to 14
   	 	Phenolic compounds (as C <sub>6</sub> H <sub>5</sub> OH)	APHA 5530- B & C, 5-49 IS 3025 (Part 43	0.001 to 100 mg/L
   		Phosphate (Total, Ortho & Dissolved)	APHA 4500 P,E, 4-164	0.1 to 500 mg/L
   		Potassium (as K)	APHA 3500-K, B, 3-89 IS 3025 (Part 45)	0.06 to 1000 mg/L
       			APHA 3120-B,3-42 IS 3025 (Part 2)/ ISO 11885	0.5 to 1000 mg/L
	     	Selenium (as Se)	APHA 3114-C, 3-40 IS 3025 (Part 56)	0.01 to 100 mg/L
       		†	APHA 3120-B,3-42 IS 3025 (Part 2)/ ISO 11885	0.005 to 100 mg/L
   	   	Silica (Total) (as SiO <sub>2</sub> )	APHA 4500-SiO <sub>2</sub> , D,4-177 IS 3025 (Part 35)	0.04 to 100 mg/L
	     	Silica (Dissolved/Reactive) (as SiO <sub>2</sub> )	APHA 4500-SiO <sub>2</sub> , D,4-177 IS 3025 (Part 35)	0.04 to 100mg/L
	   	Silica (Colloidal) (as SiO <sub>2</sub> )	APHA 4500-SiO <sub>2</sub> , D,4-177 IS 3025 (Part 35)	0.04 to 100 mg/L
     		Silver (as Ag)	Annex J of IS 13428	0.008 to 100 mg/L

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			APHA 3120-B, 3-42 IS 3025 (Part 2)/ /ISO 11885	0.005 to 100 mg/L
   	 	Silt Density Index	ASTM Procedure D4189 - 95	0.2 to 20
	   	Sodium (as Na)	APHA 3500-Na, B, 3-99 IS 3025 (Part 45)	0.2 to 10000 mg/L
       	     		APHA 3120B,3-42 IS 3025 (Part 2)/ ISO 11885	0.5 to 10000 mg/L
	<u> </u>	Sodium adsorption ratio	IS 11624	0.3 to 30
		Sulphate (as SO <sub>4</sub> )	APHA 4500- SO4 ,E,4-199 IS 3025 (Part 24)	2 to 10000 mg/L
     		Sulphide (as H <sub>2</sub> S)	APHA 4500 –S <sub>2</sub> , C-4-183, F-4-187 IS 3025 (Part 29)	0.08 to 50 mg/L
   	<del> </del>   	<del> </del>   	APHA 4500 –S <sub>2</sub> , D-4-184 IS 3025 (Part 29)	0.025 to 50 mg/L
     		Taste	IS 3025 (Part 7) IS 3025 (Part 8)	Agreeable/ Not Agreeable Action tendency Scale
   	   	Temperature	APHA 2550-B, 2-74 IS 3025 (Part 9)	0 to 100 °C
		Total Kjeldahl Nitrogen	APHA 4500 NH <sub>3</sub> , B & C, 4 - 114, 4-116 or F, 4 -119 & 4500 NOrg, , B, 4-139	0.1 to 1000 mg/L
   		Total Dissolved Solids/ Filterable Residue	APHA 2540 C, 2-69 IS 3025 (Part 16),	5 to 10000 mg/L
		Total Solids /Total Residues/ Residue on Evaporation	APHA 2540-B,2-68 IS 3025 (Part 15)	5 to 10000 mg/L
		Total Suspended Solids	APHA 2540-D,2-70 IS 3025 (Part 17)	5 to 10000 mg/L

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	   	Turbidity	APHA 2130-B,2-13 IS 3025 (Part 10)	0.2 to 1000 NTU
   	 	Oxidisable Substances	IS 1070: 1992, RA 2003, Annexure A	0.1 to 50 mg/L
		Magnesium Hardness as CaCO <sub>3</sub>	IS 3025 (Part 46): 2004, RA 2014	0.5 to 1000 mg/L
	   	Calcium Hardness	IS 3025 (Part 40): 2004, RA 2014	0.5 to 1000 mg/L
         		Zinc (as Zn)	APHA, 23 <sup>rd</sup> Ed., 2017, 3111-B, 3-20 IS 3025 (Part 49): 1994, RA 2009, Amds.1	0.01 to 100 mg/L
			APHA 3120-B,3-42 IS 3025 (Part 2)/ ISO 11885	0.05 to 100 mg/L
   	   	Barium (as Ba)	Annex F of IS 13428	0.3 to 100 mg/L
   	   	   	IS 3025 (Part 2) ISO 11885	0.1 to 100 mg/L
     		Vanadium	APHA 3120B,3-42 IS 3025 (Part 2)/ ISO 11885	0.01 to 1000 mg/L
   	     	Trihalomethanes	USEPA 551.1 AEC/C/SAP/INS/5-16 Issue	0.01 to 0.2 mg/L
 		a. Bromoform	no. 04, Issue date: 01.04.2018	
 		b.Dibromochloromethane	USEPA 551.1   AEC/C/SAP/INS/5-16,   Issue no. 04, Issue date:   01.04.2018	0.01 to 0.2 mg/L
		c.Bromodichloromethane	USEPA 551.1 AEC/C/SAP/INS/5-16, Issue no. 04, Issue date: 01.04.2018	0.01 to 0.2 mg/L

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		d.Chloroform	USEPA 551.1 AEC/C/SAP/INS/5-16, Issue no. 04, Issue date: 01.04.2018	0.01 to 0.2 mg/L
		Polynuclear aromatic hydrocarbons (as PAH)	APHA 6440,6-94	0.00007 to 100 mg/L
	<u> </u>	Naphthalene	AEC/C/SAP/INS/6-7, Issue	0.00007 to 100 mg/L
ļ	<del> </del>	Acenaphthylene	No.04, Issue Date:	0.00007 to 100 mg/L
ļ	<del> </del>	Acenaphthene	01.04.2018	0.00007 to 100 mg/L
	<del> </del>	Fluorene	<u> </u>	0.00007 to 100 mg/L
	<u> </u>	Phenanthrene		0.00007 to 100 mg/L
	<u> </u>	Anthracene		0.00007 to 100 mg/L
	T	Fluoranthene		0.00007 to 100 mg/L
		Pyrene		0.00007 to 100 mg/L
		Benzo(a)anthracene		0.00007 to 100 mg/L
		Chrysene		0.00007 to 100 mg/L
L		Benzo(b)fluoranthene		0.00007 to 100 mg/L
 	 	Benzo(k)fluoranthene	 	0.00007 to 100 mg/L
 	 	Benzo(a)pyrene	 	0.00007 to 100 mg/L
   	 	Indeno (1,2,3 ,c, d) pyrene	 	0.00007 to 100 mg/L
	T	Dibenzo(a,h)anthracene		0.00007 to 100 mg/L
		Benzo(g,h,i)perylene		0.00007 to 100 mg/L
   	 	Polychlorinated biphenyls (PCB)	Annex M of IS 13428 APHA 6440, 6-128	0.00007 to 100 mg/L
F	T	2 Chlorobiphenyl		0.00007 to 100 mg/L
	<del> </del>	2,3 Dichlorobiphenyl		0.00007 to 100 mg/L
	<del> </del>	2,2',5- Trichlorobiphenyl		0.00007 to 100 mg/L
	<u> </u>	2,4',5- Trichlorobiphenyl	AEC/C/SAP/INS/6-6, Issue	0.00007 to 100 mg/L
	<u> </u>	2,2',5,5'	No.04, Issue Date:	0.00007 to 100 mg/L
<u></u>	<u> </u>	Tetrachlorobiphenyl	01.04.2018	<u> </u>
		2,2',3,5' Tetrachlorobiphenyl	 	0.00007 to 100 mg/L

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:	<del> </del>	2,3',4,4'  Tetrachlorobiphenyl		0.00007 to 100 mg/L
	<del> </del>	2,2',4,5,5' Pentachlorobiphenyl		0.00007 to 100 mg/L
	<del> </del>	2,2',3,4,5' Pentachlorobiphenyl		0.00007 to 100 mg/L
		2,3,3',4',6 Pentachlorobiphenyl		0.00007 to 100 mg/L
	<del> </del>	2,2',3,5,5',6  Hexachlorobiphenyl		0.00007 to 100 mg/L
	†	2,2',4,4',5,5'  Hexachlorobiphenyl		0.00007 to 100 mg/L
	† !	2,2',3,4,5,5' Hexachlorobiphenyl		0.00007 to 100 mg/L
	<del> </del>	2,2',3,4,4',5' Hexachlorobiphenyl		0.00007 to 100 mg/L
	† ! !	2,2',3,4',5,5',6 Heptachlorobiphenyl		0.00007 to 100 mg/L
	†	2,2',3,4,4',5',6 Heptachlorobiphenyl		0.00007 to 100 mg/L
		2,2',3,4,4',5,5' Heptachlorobiphenyl	 	0.00007 to 100 mg/L
		2,2',3,3',4,4',5  Heptachlorobiphenyl	 	0.00007 to 100 mg/L
	<del> </del>	2,2',3,3',4,4',5,5',6 Nonachlorobiphenyl		0.00007 to 100 mg/L
	<del>                                     </del>	Pesticide Residues p,p DDT	US EPA 508	0.05 μg/L to 100 mg/L
	<del>                                     </del>	†'	US EPA 525.2 APHA 6410-B,6-74	0.01 μg/L to 100 mg/L
	<del>                                     </del>	o,p DDT	US EPA 508 US EPA 525.2 APHA 6410B,6-74	0.05 μg/L to 100 mg/L 0.01 μg/L to 100 mg/L

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	T	p,p DDE	US EPA 508	0.05 μg/L to 100 mg/L
	<del> </del>	<del> </del>	US EPA 525.2	0.01 μg/L to 100 mg/L
i	l I	İ	APHA 6410B,6-74	
F	<u> </u>	o,p DDE	US EPA 508	0.05 μg/L to 100 mg/L
	<u> </u>	<del> </del>	US EPA 525.2	0.01 μg/L to 100 mg/L
į		İ	APHA 6410B,6-74	
F		p,p DDD	US EPA 508	0.05 μg/L to 100 mg/L
		T	US EPA 525.2	0.01 µg/L to 100 mg/L
Ĺ	<u>i</u>	<u>i                                     </u>	APHA 6410B,6-74	
		o,p DDD	US EPA 508	0.05 μg/L to 100 mg/L
			US EPA 525.2	0.01 μg/L to 100 mg/L
<u>i</u>	<u>i</u>	<u>i</u>	APHA 6410B,6-74	
 	 	Gamma HCH (Lindane)	US EPA 508	0.05 µg/L to 100 mg/L
1	 	] ]	US EPA 525.2	0.01 µg/L to 100 mg/L
<u>i</u>	<u>i</u>	<u> </u>	APHA 6410B,6-74	
L	 <del> </del>	Alfa HCH	US EPA 508	0.05 µg/L to 100 mg/L
1	[ [	] 	US EPA 525.2	0.01 µg/L to 100 mg/L
<u> </u>	<u> </u>	<u> </u>	APHA 6410-B,6-74	
L	 <b> </b>	Beta HCH	US EPA 508	0.025 µg/l to 100 mg/L
1	1	1	US EPA 525.2	0.01 μg/L to 100 mg/L
<u>L</u>	<u> </u>	 <del> </del>	APHA 6410B,6-74	
<u> </u>	 <del> </del>	Delta HCH	US EPA 508	0.05 µg/L to 100 mg/L
1		İ	US EPA 525.2	0.01 µg/L to 100 mg/L
L	<del> </del>	 <del> </del>	APHA 6410B, 6-74	
<u> </u>	<del> </del>	Alfa Endosulfan	US EPA 508	0.05 µg/L to 100 mg/L
İ	l I	İ	US EPA 525.2	0.01 µg/L to 100 mg/L
L	<del> </del>	 <del> </del>	APHA 6410B, 6-74	
<u> </u>	<u> </u>	Beta Endosulfan	US EPA 508	0.05 µg/L to 100 mg/L
		İ	US EPA 525.2	0.01 µg/L to 100 mg/L
<u> </u>	<u> </u>	 	APHA 6410B, 6-74	
<u> </u>	<del> </del>	EndosulfanSulphate	US EPA 508	0.05 µg/L to 100 mg/L
		İ	US EPA 525.2	0.01 µg/L to 100 mg/L
L	<u>!</u>	<u> </u>	APHA 6410B,6-74	

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	T	Monocrotophos	US EPA 8141A,	0.07 µg/L to 100mg/L
	<u> </u>	<u> </u>	US EPA 525.2	0.05 μg/L to 100mg/L
į		İ	APHA 6410B, 6-74	
	 	Ethion	US EPA 8141A	0.07 μg/L to 100mg/L
<u>L</u>	<u> </u>	<u>i                                     </u>	US EPA 1657A	
		}	US EPA 525.2	0.05 μg/L to 100 mg/L
<u>L</u>	<u> </u>	<u> </u>	APHA 6410B, 6-74	
L	 	Chlorpyriphos	US EPA 8141A	0.07 µg/L to 100 mg/L
		}	US EPA 525.2	0.05 µg/L to 100mg/L
<u>i</u>	<u> </u>	<u> </u>	APHA 6410B, 6-74	
L	 	Phorate	US EPA 8141A	0.07 μg/L to 100 mg/L
L	 	Phoratesulphoxide	US EPA 8141A	0.07 μg/L to 100 mg/L
1			US EPA 525.2	0.05 µg/L to 100 mg/L
<u> </u>	<u> </u>	<u> </u>	APHA 6410B, 6-74	
L	 <del> </del>	Phoratesulphone	US EPA 8141A	0.07 µg/L to 100 mg/L
1	 		US EPA 525.2,1995	0.05 μg/L to 100 mg/L
<u> </u>	<u> </u>	<u> </u>	APHA 6410B, 6-74	
<u> </u>	 	2,4-D	US EPA 515.1	0.07 μg/L to 100 mg/L
<u> </u>	 <del> </del>	Butachlor	US EPA 508	0.07 µg/L to 100 mg/L
1			US EPA 525.2	0.01 µg/L to 100 mg/L
L	<u> </u>	<u> </u>	APHA 6410B, 6-74	
<u> </u>	 <del> </del>	Isoproturon	US EPA 532	0.07 μg/L to 100 mg/L
<u> </u>	 <del> </del>	Alachlor	US EPA 508	0.07 µg/L to 100 mg/L
1	 		US EPA 525.2	0.01 µg/L to 100 mg/L
<u> </u>	<del> </del>	<u> </u>	APHA 6410B, 6-74	
<u> </u>	 <del> </del>	Atrazine	US EPA 8141A	0.07 µg/L to 100 mg/L
	 		US EPA 525.2	0.01 µg/L to 100 mg/L
L	<u> </u>	<u> </u>	APHA 6410B, 6-74	
<u> </u>	<u> </u>	Methyl Parathion	US EPA 8141A	0.07 µg/L to 100 mg/L
	 		US EPA 525.2	0.05 µg/L to 100 mg/L
     	 	 	APHA 6410B, 6-74	

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	T	Methyl Paraoxon	US EPA 8141A	0.07 μg/L to 100 mg/L
ļ	<del> </del>	<u> </u>	US EPA 525.2	0.05 μg/L to 100 mg/L
Ĺ	<u> </u>	<u>i                                     </u>	APHA 6410B, 6-74	
		Malathion	US EPA 8141A	0.07 μg/L to 100 mg/L
			US EPA 525.2	0.05 μg/L to 100 mg/L
ļ	į	İ	APHA 6410B,6-74	
ļ		Malaoxon	US EPA 8141A	0.07 μg/L to 100 mg/L
			US EPA 525.2	0.05 μg/L to 100 mg/L
Ĺ	<u> </u>	<u>i                                     </u>	APHA 6410B,6-74	
		Aldrin	US EPA 508	0.025 µg/L to 100 mg/L
			US EPA 525.2	0.01 µg/L to 100 mg/L
<u></u> .	<u> </u>	<u> </u>	APHA, 6410B,6-74	<u> </u>
 	 	Dieldrin	US EPA 508	0.025 µg/L to 100 mg/L
 		ł	US EPA 525.2	0.01 µg/L to 100 mg/L
<u>i</u>	<u> </u>	<u> </u>	APHA 6410B,6-74	
2.	Packaged	Description	IS 14543	Qualitative
	Drinking	Colour (Pt-Co)	IS 3025 (Part 4)	1 to 500 Hazen units
	Water,	Odour	IS 3025 (Part 5)	Qualitative
!	Packaged Natural			Agreeable/ Not
Ĺ	Mineral	<u> </u>	ı L	Agreeable
 		Taste	IS 3025 (Part 8)	Qualitative
		!		Agreeable/ Not
<u> </u>	<u> </u>	<u> </u>	L	Agreeable
L	! <b></b>	Turbidity	IS 3025 (Part 10)	0.2 to 1000 NTU
   	   	Total Dissolved Solids	IS 3025 (Part 16)	5 to 10000 mg/l
F	<del> </del>	pH value	IS 3025 (Part 11)	1 to 14
	   	Barium i (as Ba)	Annex F of IS 13428	0.3 to 100 mg/L
		†	IS 3025 (Part 2)/ ISO 11885	0.1 to 100 mg/L
	   	Copper (as Cu)	IS 3025 (Part 42)	0.04 to 100 mg/L

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	 	T	IS 3025 (Part 2)/ ISO 11885	0.02 to 100 mg/L
   	 	Iron (as Fe)	IS 3025 (Part 53)	0.08 to 100 mg/L
   	 		IS 3025 (Part 2)/ ISO 11885	0.06 to 100 mg/L
F	T	Manganese	IS 3025 (Part 59)	0.05 to 100 mg/L
   	   	(as Mn)	IS 3025 (Part 2)/ ISO 11885	0.02 to 100 mg/L
F	<u> </u>	Nitrate (as NO₃)	IS 3025 (Part 34)	0.05 to 100 mg NO <sub>3</sub> /L
	<u> </u>	Nitrite (as NO <sub>2</sub> )	IS 3025 (Part 34)	0.01 to 100 mg/L
   		Fluoride (as F)	IS 3025 (Part 60)	0.05 to 20 mg/L
   		Zinc (as Zn)	IS 3025 (Part 49)	0.01 to 100 mg/L
   	   	T	IS 3025 (Part 2)/ ISO 11885	0.05 to 100 mg/L
	<del> </del>   	Silver (as Ag)	Annex J of IS 13428	0.008 to 100 mg/L
   	<del> </del>   	↑``9'   	IS 3025 (Part 2)/ ISO 11885	0.005 to 100 mg/L
   	<del> </del>   	Aluminium (As Al)	IS 3025 (Part 55)	0.025 to 100 mg/L
	   	T`	IS 3025 (Part 2)/ ISO 11885	0.01 to 100 mg/L
   	   	Chloride (as Cl)	IS 3025 (Part 32)	0.25 to 10000 mg/L
   	   	Selenium (as Se)	IS 3025 (Part 56)	0.01 to 100 mg/L
   	   	T	IS 3025 (Part 2)/ ISO 11885	0.005 to 100 mg/L
		Sulphate (as SO <sub>4</sub> )	IS 3025 (Part 24)	2 to 10000 mg/L

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		Alkalinity (as HCO <sub>3</sub> )	IS 3025 (Part 23)	0.5 to 5000 mg/L
   	 	Calcium (as Ca)	IS 3025 (Part 40)	0.4 to 1000 mg/L
   			IS 3025 (Part 2)/ ISO 11885	0.5 to 100 mg/L
		Magnesium (as Mg)	IS 3025 (Part 46)	0 to 1000 mg/L
   		 	IS 3025 (Part 2)/ ISO 11885	0.5 to 1000 mg/L
   		Sodium (as Na)	IS 3025 (Part 45)	0.2 to 500 mg/L
			IS 3025 (Part 2)/ ISO 11885	0.5 to 500 mg/L
   		Residual free chlorine	IS 3025 (Part 26)	0.1 to 100 mg/L 0.005 to 0.01 mg/L
   	 	Phenolic compounds (as C <sub>6</sub> H <sub>5</sub> OH)	Clause 6 of IS 3025 (Part 43)	0.001 to 100 mg/L
F	T	Mineral oil	IS 3025 (Part 39)	1 to 100 mg/L
   	 		Clause 6 of IS: 3025 (Part 39)	0.005 to 100 mg/L
		Anionic surface active agents (as MBAS)	Annexure K of IS 13428	0.1 to 50 mg/L
   	 	Sulphide (as H <sub>2</sub> S)	IS 3025 (Part 29)	0.08 to 50 mg/L
	<u> </u>	†	IS 3025 (Part 29)	0.025 to 50 mg/L
   	 	Antimony (as Sb)	USEPA/SW 846/7062,	0.005 to 100 mg/L
   	   	 	IS 3025 (Part 2)/ ISO 11885	0.003 to 100 mg/L
		<u> </u>	Annex G of IS 13428	0.002 to 100 mg/L
		Borate (as B)	Annex H of IS 13428	0.1 to 50 mg/L

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	   	T	IS 3025 (Part 2)/ ISO 11885	0.1 to 50 mg/L
	   	Bromate (as BrO <sub>3</sub> )	ISO 15061	0.005 to 0.1 mg/L
	   	Mercury (as Hg)	IS 3025 (Part 48)	0.005 to 100 mg/L
	   	T	IS 3025 (Part 2)/ ISO 11885	0.0008 to 100 mg/L
	   	Cadmium (as Cd)	IS 3025 (Part 41)	0.1 to 100 mg/L
	   	   	IS 3025 (Part 2)/ ISO 11885	0.002 to 100 mg/L
	   	Arsenic (as As)	IS:3025 (Part 37)	0.01 to 100 mg/L
	   	   	IS 3025 (Part 2)/ ISO 11885	0.005 to 100 mg/L
	   	Cyanide (as CN)	Clause 2 of IS 3025 (Part 27)	0.001 to 10 mg/L
	   	Lead (as Pb)	IS 3025 (Part 47)	0.1 to 100 mg/L
	   	   	IS 3025 (Part 2) / ISO 11885	0.008 to 100 mg/L
	   	Chromium (as Cr)	Annex J of IS 13428 IS 3025 (Part 52)	0.1 to 100 mg/L
	   	T	IS 3025 (Part 2)/ ISO 11885	0.02 to 100 mg/L
	   	Nickel (as Ni)	Annex L of IS 13428 IS 3025 (Part 54)	0.06 to 100 mg/L
	       		IS 3025 (Part 2)/ ISO 11885	0.01 to 100 mg/L

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V.	RESIDUES IN WATE	R		
<b>1.</b>	Residues in water	Polychlorinated biphenyls (PCB)  2 Chlorobiphenyl  2,3 Dichlorobiphenyl  2,2',5- Trichlorobiphenyl  2,4',5- Trichlorobiphenyl  2,2',5,5' Tetrachlorobiphenyl  2,2',3,5' Tetrachlorobiphenyl  2,3',4,4' Tetrachlorobiphenyl  2,2',4,5,5' Pentachlorobiphenyl  2,2',3,4,5' Pentachlorobiphenyl  2,2',3,4,5' Pentachlorobiphenyl  2,2',3,5,5',6 Hexachlorobiphenyl  2,2',4,4',5,5' Hexachlorobiphenyl  2,2',3,4,5,5' Hexachlorobiphenyl  2,2',3,4,5,5' Hexachlorobiphenyl  2,2',3,4,5,5' Hexachlorobiphenyl  2,2',3,4,5,5' Hexachlorobiphenyl  2,2',3,4,5,5',6 Heptachlorobiphenyl  2,2',3,4,5,5',6 Heptachlorobiphenyl  2,2',3,4,4',5,5',6 Heptachlorobiphenyl  2,2',3,4,4',5,5',6	Annex M of IS 13428 APHA 6630C, 6-128 AEC/C/SAP/INS/6-6, Issue No.04, Issue Date: 01.04.2018	0.07 μg/L to 100 mg/L  0.07 μg/L to 100 mg/L  0.07 μg/L to 100 mg/L  0.07 μg/L to 100 mg/L  0.07 μg/L to 100 mg/L  0.07 μg/L to 100 mg/L  0.07 μg/L to 100 mg/L  0.07 μg/L to 100 mg/L  0.07 μg/L to 100 mg/L  0.07 μg/L to 100 mg/L  0.07 μg/L to 100 mg/L  0.07 μg/L to 100 mg/L  0.07 μg/L to 100 mg/L  0.07 μg/L to 100 mg/L  0.07 μg/L to 100 mg/L  0.07 μg/L to 100 mg/L  0.07 μg/L to 100 mg/L  0.07 μg/L to 100 mg/L
     	 	Heptachlorobiphenyl	 	

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   		2,2',3,4,4',5,5' Heptachlorobiphenyl	   	0.07 μg/L to 100 mg/L
   	   	2,2',3,3',4,4',5 Heptachlorobiphenyl	   	0.07 μg/L to 100 mg/L
   	   	2,2',3,3',4,4',5,5',6 Nonachlorobiphenyl	   	0.07 μg/L to 100 mg/L
   		Polynuclear aromatic hydrocarbons (PAH)	APHA 6440, 6-94	0.07 μg/L to 100 mg/L
		Naphthalene	AEC/C/SAP/INS/6-7, Issue	0.07 μg/L to 100mg/L
		Acenaphthylene	No.04, Issue Date:	0.07 µg/L to 100mg/L
		Acenaphthene	01.04.2018	0.07 µg/L to 100mg/L
 	 	Fluorene	 	0.07 µg/L to 100mg/L
 	 	Phenanthrene	 	0.07 µg/L to 100mg/L
 	 	Anthracene	 	0.07 μg/L to 100mg/L
 	 	Fluoranthene	 	0.07 μg/L to 100mg/L
 	 	Pyrene	 	0.07 μg/L to 100mg/L
 	 <del> </del>	Benzo(a)anthracene	 	0.07 μg/L to 100mg/L
 	 <del> </del>	Chrysene	 	0.07 μg/L to 100mg/L
 	 <del> </del>	Benzo(b)fluoranthene	 	0.07 μg/L to 100mg/L
 	 <del> </del>	Benzo(k)fluoranthene	 	0.07 μg/L to 100mg/L
 	 <del> </del>	Benzo(a)pyrene	 	0.07 μg/L to 100mg/L
 	 <del> </del>	Indeno (1,2,3,c,d) pyrene	 	0.07 μg/L to 100mg/L
 	 <del> </del>	Dibenzo(a,h)anthracene	 	0.07 μg/L to 100mg/L
 	 	Benzo(g,h,i)perylene	ı L	0.07 μg/L to 100mg/L
	 	Pesticide Residues p,p DDT	US EPA 508	0.00005 to 100 mg/L
			US EPA 525.2 APHA 6410-B,6-74	0.00001 to 100 mg/L
		o,p DDT	US EPA 508	0.00005 to 100 mg/L
     			US EPA 525.2 APHA 6410-B,6-74	0.00001 to 100 mg/L

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	T	p,p DDE	US EPA 508	0.00005 to 100 mg/L
	<del> </del>	<del> </del>	US EPA 525.	0.00001 to 100 mg/L
i		1	APHA 6410-B,6-74	
	T	o,p DDE	US EPA 508	0.00005 to 100 mg/L
	<del> </del>	<del> </del>	US EPA 525.2	0.00001 to 100 mg/L
i		İ	APHA 6410B,6-74	
	T	p,p DDD	US EPA 508	0.00005 to 100 mg/L
	<u> </u>	T	US EPA 525.2	0.00001 to 100 mg/L
İ		ļ	APHA 6410B,6-74	_
	T	o,p DDD	US EPA 508	0.00005 to 100 mg/L
	T	T	US EPA 525.2	0.00001 to 100 mg/L
į		İ	APHA 6410B,6-74	_
	T	γ HCH (Lindane)	US EPA 508	0.00005 to 100 mg/L
	T	T	US EPA 525.2	0.00001 to 100 mg/L
Ĺ		<u>i                                     </u>	APHA 6410B,6-74	
		α HCH	US EPA 508	0.00005 to 100 mg/L
	1	T	US EPA 525.2	0.00001 to 100 mg/L
<u>L</u>	<u> </u>	<u>i                                     </u>	APHA 6410B,6-74	
		β НСН	US EPA 508	0.00005 to 100 mg/L
	T	T	US EPA 525.2	0.00001 to 100 mg/L
Ĺ	<u> </u>	<u>i                                     </u>	APHA 6410B,6-74	
		δ ΗCΗ	US EPA 508	0.00005 to 100 mg/L
			US EPA 525.2	0.00001 to 100 mg/L
<u>L</u>	<u>i</u>	<u>i                                     </u>	APHA 6410B,6-74	
		α Endosulfan	US EPA 508	0.00005 to 100 mg/L
			US EPA 525.2	0.00001 to 100 mg/L
<u>L</u>	<u> </u>	<u>i</u>	APHA 6410B,6-74	
<u> </u>	 	β Endosulfan	US EPA 508	0.00005 to 100 mg/L
		] 	US EPA 525.2	0.00001 to 100 mg/L
<u>i</u>	<u>i</u>	<u>i</u>	APHA 6410B,6-74	
L	 	EndosulfanSulphate	US EPA 508	0.00005 to 100 mg/L
			US EPA 525.2	0.00001 to 100 mg/L
<u>L</u>	<u>i</u>	<u> </u>	APHA 6410-B,6-74	

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F	<del> </del>	Monocrotophos	US EPA 8141A	0.00007 to 100 mg/L
ļ	<del> </del>		US EPA 525.2	0.00005 to 100 mg/L
			APHA 6410-B,6-74	
ļ	<del> </del>	Ethion	US EPA 8141A	0.00007 to 100 mg/L
ļ	<del> </del>		US EPA 525.2	0.00005 to 100 mg/L
ì			APHA 6410-B,6-74	
ļ	<del> </del>	Chlorpyrifos	US EPA 8141A	0.00007 to 100 mg/L
F			US EPA 525.2	0.00005 to 100 mg/L
ļ			APHA 6410B,6-74	
		Phorate	US EPA 8141A	0.00007 to 100mg/L
		Phoratesulphoxide	US EPA 8141A	0.00007 to 100 mg/L
			US EPA 525.2	0.00005 to 100 mg/L
<u> </u>		<u> </u>	APHA 6410-B, 6-74	
		Phoratesulphone	US EPA 8141A	0.00007 to 100mg/L
			US EPA 525.2	0.00005 to 100 mg/L
Ĺ	<u>i</u>	<u>i                                     </u>	APHA 6410-B,6-74	<u> </u>
		2,4-D	US EPA 515.1	0.00007 to 100 mg/L
		Butachlor	US EPA 508	0.00007 to 100 mg/L
			US EPA 525.2	0.00001 to 100 mg/L
Ĺ		<u>i</u>	APHA 6410B,6-74	
		Isoproturon	US EPA 532	0.00007 to 100 mg/L
L		Alachlor	US EPA 508	0.00007 to 100 mg/L
			US EPA 525.2	0.00001 to 100 mg/L
<u>L</u>	<u> </u>	<u>i</u>	APHA 6410B, 6-74	<u> </u>
		Atrazine	US EPA 532	0.00007 to 100 mg/L
			US EPA 525.2	0.00001 to 100 mg/L
<u>L</u>		<u>i</u>	APHA 6410-B,6-74	<u> </u>
	L	Methyl Parathion	US EPA 8141A	0.00007 to 100 mg/L
			US EPA 525.2	0.00005 to 100 mg/L
<u>i</u>	<u> </u>	<u>i</u>	APHA 6410-B,6-74	<u> </u>
	 	Methyl Paraoxon	US EPA 8141A	0.00007 to 100 mg/L
			US EPA 525.2	0.00005 to 100 mg/L
i		İ	APHA 6410-B,6-74	i

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	T	Malathion	US EPA 8141A	0.00007 to 100 mg/L
	<del> </del>	· <del> </del>	US EPA 525.2	0.00005 to 100 mg/L
			APHA 6410-B,6-74	
		Malaoxon	US EPA 8141A	0.00007 to 100 mg/L
		- <del></del>	US EPA 525.2	0.00005 to 100 mg/L
		<u>i</u>	APHA 6410-B,6-74	
		Aldrin	US EPA 5085	0.000025 to 100 mg/L
			US EPA 525.2	0.00001 to 100 mg/L
	<u> </u>	<u>i</u>	APHA 6410-B,6-74	
	 <del> </del>	Dieldrin	US EPA 508	0.000025 to 100 mg/L
			US EPA 525.2	0.00001 to 100 mg/L
	İ		APHA 6410-B,6-74	i I
/I.	MARINE AND AQU	A CULTURE PRODUCTS	   	   
ī.	Fish and Fish Products, Sea Foods	Total Volatile Bases (Nitrogen)	FSSA Lab Manual, Fish and Fish Products (1.2) 2016	1 to 30 mg/kg
	†   	Moisture	AOAC, 20 <sup>th</sup> Ed.,2016, Method no.950.46, Ch-39	1 to 90 g/100g (%)
	†   	Ash	AOAC, 20 <sup>th</sup> Ed.,2016, Method no.938.08 ,Ch-35	0.01 to 10 g/100g (%)
	T	Protein (N x 5.80)	IS 7219: 1973, RA 2010	0.1 to 50 g/100g (%)
	T	Fat	FSSAI Lab Manual, Fish	0.5 to 50 g/100g (%)
	   		and Fish Products 6 (2.1), 2016	
	 	Energy		1 to 1000 kcal/100g

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VII.	FOOD & AGRICULT	URAL PRODUCTS		
1.	Milk and Dairy Products (Including Foods for Infant nutrition)	Moisture	FSSAI Lab Manual, Milk and Milk Products (3.2, 5.2, 6.2, 8.2, 10.2, 11.2, 12.2, 13.2, 16.2, 17.2), 2016 AOAC Method no. 927.05, Ch-33, AOAC Method no. 926.08,Ch-33, IS 2785 IS 1479 (Part II), AOAC Method no. 920.116,Ch-33 IS 3507, IS 548 (Part 1)	1 to 90 g/100g or 100 ml(%)
		pHTotal Solids	IS 1479 (Part II) FSSAI Lab Manual, Milk and Milk Products (1.3.3, 4.4, 4.5, 7.2, 9.2, 14.2) AOAC Method no.925.23,Ch-33, AOAC Method no. 941.08, Ch-33, AOAC Method no. 920.107, Ch-33, IS 2802, Edition 1.4 IS 1479 (Part II)	2 to 12 1 to 99 g/100g or 100 ml(%)
		Total Ash	FSSAI Lab Manual, Milk and Milk Products (10.7, 14.6, 16.5, 17.7), 2016 IS 1479 (Part II): 1961, RA 2013 Amds. 1 AOAC, 20 <sup>th</sup> Ed.,2016, Method no. 945.46,Ch-33, AOAC, 20 <sup>th</sup> Ed.,2016,, Method no. 930.30,Ch-33, IS 11623, Annex B, 2008, RA 2013	0.05 to 10g/100g or 100 ml(%)

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       		Acid Insoluble Ash	FSSAI Lab Manual, Milk and Milk Products (10.8), IS 11623, Annex C,	0.05 to 2 g/100g or 100 ml(%)
		Milk Fat	FSSAI Lab Manual, Milk and Milk Products (1.3.4.3, 2.2.1, 3.3, 4.2, 5.3, 6.3, 7.4, 9.3, 10.3, 11.3, 12.3, 14.3, 15.3, 16.3, 17.3), 2016 IS 2802 (Part II), IS 1479 (Part II) AOAC Method no. 995.19, Ch-33 AOAC Method no.989.05,Ch-33, AOAC Method no.938.06,Ch-33,IS 11721	0.1 to 99 g/100g or 100 ml(%)
		Phosphorus	IS 1479 (Part II)	1 to 500 mg/100g or 100 ml(%)
       	     	Milk Protein in Milk solid not Fat	FSSAI Lab Manual, Milk and Milk Products (9.6), IS 7219	1 to 50 g/100g or 100 ml(%)
		Titrable Acidity	FSSAI Lab Manual, Milk and Milk Products (9.5, 10.4, 14.5, 15.5), IS 11766 / ISO 6092 AOAC Method no. 947.05,Ch-33	0.1 to 2 g/100g or 100 ml(%)
	T	Carbohydrate	FSSAI Lab Manual, Milk and Milk Products (10.5), USFDA Title 21	1 to 70 g/100g or 100 ml(%)
       	     	Sucrose	FSSAI Lab Manual, Milk and Milk Products (11.5, 9.4.1)	1 to 70 g/100g or 100 ml(%)

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	T	T	IS 1479 (Part II)	
     	   	Milk Solids not Fat	AOAC Method no. 990.21,Ch-33	1 to 15 g/100g or 100 ml (%)
		Protein( N x 6.28)	FSSAI Lab Manual, Milk and Milk Products (10.6,14.4,15.4,16.4,17.4, 19.1) IS 1479 (Part II) IS 7219	0.4 to 50 g/100g or 100 ml(%)
		Casein in Protein	FSSAI Lab Manual, Milk and Milk Products (17.5)	1 to 98 g/100g or 100 ml(%)
		Sugar	FSSAI Lab Manual, Milk and Milk Products (11.5, 9.4.1)	0.5 to 10 g/100g or 100 ml(%)
         	 	Solubility Percent	FSSAI Lab Manual, Milk and Milk Products (10.11) IS 2759	10 to 100 g/100g(%)
     		Vitamin C	AOAC Method no. 985.33,Ch-50 IS 5838	5 to 100 mg/100g or 100 ml(%)
		Common Salt	FSSAI Lab Manual, Milk and Milk Products (12.4.2) AOAC Method no.960.29,Ch-33 IS 3507	0.01 to 5 g/100g or 100 ml(%)
	 	Lactose	FSSAI Lab Manual, Milk and Milk Products (9.4.1)	0.5 to 50 g/100g(%)
         	       	Chloride	IS 1479 (Part II)	1 to 500 mg/100 g

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		Scorched particles in Infant milk substances, Skimmed Milk Powder and Milk Powder	IS 13500	7.5 to 50 mg
		Lead	AOAC Method no.984.27 & 2011.14, Ch-50, AEC/C/SAP/INS/3-4 Issue no.04, Issue date:01.04.2018 FSSAI Lab Manual (5)	0.02 to 100 mg/l or mg/kg
       	Ghee	Rancidity	AEC/C/SAP/F-100 Issue no.: 04, Issue date: 01.04.2018	Present/Absent
         		Baudouin Test (Test for presence of Sesame oil)	FSSAI Lab Manual, Oils and Fats (15) AOAC Method no. 893.01,Ch-41	Positive/ Negative
     		ButyroRefractometer reading at 40°C/ Refractive Index at 40°C	FSSAI Lab Manual, Oils and Fats (5.0) IS 548 (Part I)	1.422 to 1.489 0 to 99.1
     	     	Reichert Value	FSSAI Lab Manual, Oils and Fats (13.0) IS 548 (Part I)	0.2 to 50
     	     	Free fatty acid as Oleic acid	FSSAI Lab Manual, Oils and Fats (11.8) IS 548 (Part I)	0.01 to 10g/100g(%)
     	       	Peroxide Value	FSSAI Lab Manual, Oils and Fats (38.1) IS 548 (Part I)	0.1 to 10 meq/kg
		Mineral Oil	FSSAI Lab Manual, Oils and Fats (28) FSSAI Instruction Manual (Part II), Page no. 11, 2012	Present/Absent
í	<u> </u>	Moisture and volatile	FSSAI Lab Manual, Oils	0.1 to 10 g/100g (%)

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		matter	and Fats (3), IS 548 (Part 1), AOAC Method no.926.12/ 984.20, Ch-41	
	Adulterants in Milk & Milk Products	Cane Sugar	FSSAI Lab Manual, Milk and Milk Products (1.2.1), IS1479 (Part II)	Qualitative Present/Absent
		Starch	FSSAI Lab Manual, Milk and Milk Products (1.2.2), IS1479 (Part II)	Qualitative (Present/Absent)
		Cellulose	FSSAI Lab Manual, Milk and Milk Products (1.2.3),	Qualitative (Present/Absent)
	 	Urea    -  -	FSSAI Lab Manual, Milk and Milk Products (1.2.4), IS1479(Part II)	Qualitative Present/Absent
		Ammonium Sulphate	FSSAI Lab Manual, Milk and Milk Products (1.2.5), IS1479(Part II)	Qualitative Present/Absent
     	     	Added glucose in milk and milk product	FSSAI Lab Manual, Milk and Milk Products (1.2.7), IS1479(Part II)	Qualitative Present/Absent
	     	Sodium Chloride	FSSAI Lab Manual, Milk and Milk Products (1.2.8), IS 1479 (Part II)	Qualitative Present/Absent
		Quaternary ammonium compounds (Detergent)	FSSAI Lab Manual, Milk and Milk Products (1.2.13), IS1479 (Part II)	Qualitative Present/Absent
     	†	Detection of Neutralizers	FSSAI Lab Manual, Milk and Milk Products (1.2.11), IS1479 (Part II)	Qualitative Present/Absent
     	†	Hypochlorites and Chloramines	FSSAI Lab Manual, Milk and Milk Products (1.2.12), IS1479 (Part II)	Qualitative Present/Absent
	†   	Glucose	FSSAI Lab Manual, Milk and Milk Products (1.2.7),	Qualitative Present/ Absent

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	 	Detergent containing Alkylbenzenesulphonic acid	FSSAI Lab Manual, Milk and Milk Products (1.2.14), IS1479 (Part II)	Qualitative Present/Absent
       		Presence of Skimmed milk powder in raw milk	FSSAI Lab Manual, Milk and Milk Products (1.2.15), IS1479 (Part II)	Qualitative Present/Absent
		Added Starch in ice cream	FSSAI Lab Manual, Milk and Milk Products (1.2.2), 2016	Qualitative Present/ Absent
		Melamine	AEC/C/SAP/INS/1-6, Issue No.04, Issue date: 01.04.2018	0.01 to 5 mg/kg
   !	   	Maltodextrin	IS1479(Part II):1961, RA 2013,Amds.1	Qualitative Present/Absent
		Hydrogen Peroxide	NDRI Publication No.88/2012, Karnal,page no.10 FSSAI Lab Manual, Milk and Milk Products (1.2.18),	Qualitative Present/Absent
       	Preservatives in Milk	Test for Formalin	FSSAI Lab Manual, Milk and Milk Products (1.2.17), IS1479 (Part II)	Qualitative Present/Absent
     	†	Boric acid and Borates	FSSAI Lab Manual, Milk and Milk Products (1.2.19), IS 1479 (Part II)	Qualitative Present/Absent
   	   	Salicylic acid	FSSAI Lab Manual (1.2.20),	Qualitative Present/Absent
<b>2.</b>	Edible Oils, Fats & their Products	Clarity	AEC/C/SAP/F-84, Issue no.: 04, Issue date: 01.04.2018	Qualitative Clear/Turbid
         		Rancidity	FSSAI Lab Manual, Oils and Fats (38) FSSAI Instruction Manual (Part II) Page no.12, 2012	Qualitative Present/Absent

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		Suspended   matter/Foreign matter	AEC/C/SAP/F-127, Issue no.: 04,Issue date: 01.04.2018	Qualitative Present/Absent
		Mineral Oil	FSSAI Lab Manual, Oils and Fats (28-A) AOAC , Method no. 945.10, Ch-41	Qualitative Present/Absent
   	 	Cloud Point	FSSAI Lab Manual, Oils and Fats (17)	1 to 50°C
     		Bellier Test (Turbidity temperature Acetic acid Method)	FSSAI Lab Manual, Oils and Fats (14)	1 to 50°C
   	 	Baudouin Test (Test for Sesame oil) Flash Point	FSSAI Lab Manual, Oils and Fats (15) FSSAI Lab Manual, Oils	Qualitative Positive/Negative 50°C to 400°C
 	 	(Pensky Marten Closed cup method) Phosphorous	and Fats (6)	0.002 to 0.1g/100g (%)
             		Moisture and volatile matter	and Fats (34) FSSAI Lab Manual, Oils and Fats (3) IS 548 (Part 1) AOAC Method no.926.12/ 984.20, Ch-41	0.1 to 10 g/100g (%)
   	   	Presence of Pomace oil in olive oil	FSSAI Lab Manual, Oils and Fats (25)	Qualitative Present/Absent
         		Refractive Index at 40°C (B.R.Reading at 40°C)	FSSAI Lab Manual, Oils and Fats (5), IS 548 (Part 1), AOAC Method no.921.08 Ch-41	1.422 to 1.489 0.1 to 99.1
		Saponification Value	FSSAI Lab Manual, Oils and Fats (9) IS 548 (Part 1) AOACMethod no.920.160,Ch-41	1.0 to 500

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Castor Oil Test	FSSAI Instruction Manual, Oils and Fats (Part II), Page no.11	Qualitative Positive/Negative
		Argemone Oil Test	FSSAI Lab Manual, Oils and Fats (30) FSSAI, Instruction Manual (Part II),Page no.11	Qualitative Positive/Negative
       		Halphen's Test	FSSAI Lab Manual, Oils and Fats (16), 2016 FSSAI, Instruction Manual, (Part II),Page no.11	Positive/Negative
         		Acid Value	FSSAI Lab Manual, Oils and Fats (11.1.5), IS 548 (Part 1), AOAC Method no.940.28, Ch-41	0.1 to 15
     		Unsafonifiable Matter	FSSAI Lab Manual, Oils and Fats (10) IS 548 (Part 1)	0.1 to 20g/100g(%)
		lodine Value (Wij's Method)	FSSAI Lab Manual, Oils and Fats (12), IS 548 (Part 1) AOAC Method no.993.20, Ch-41	0.1 to 250
		Peroxide Value	FSSAI Lab Manual, Oils and Fats (38.1) IS 548 (Part 1) AOAC Method no.965.33, Ch-41	1.0 to 40 meq/kg
		Free fatty acid	FSSAI Lab Manual, Oils and Fats (11.8), IS 548 (Part 1) AOAC Method no.940.28, Ch-41	0.01 to 1g/100g(%)

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Insoluble Impurities/ (Suspended or other foreign matter)	IS 548 (Part 1)	0.02 to 20g/100g(%)
   	 	Volatile Matter	AOAC Method no.926.12, Ch-41	0.1 to 20g/100g(%)
     	     	Melting point	FSSAI Lab Manual, Oils and Fats (8.1), IS 548 (Part 1)	5 to 50°C
       		Reichert Value	FSSAI Lab Manual, Oils and Fats (13), IS 548 (Part 1):	1 to 50
		Polensky Value	FSSAI Lab Manual, Oils and Fats (13), IS 548 (Part 1)	1 to 50
   	 	Polybromide Test	IS 546,Annex C	Qualitative Positive/Negative
		Allyllsothio-cyanate	IS 548 (Part 1)	0.1 to 1 g/100g(%)
   	 	Semi Siccative Oil Test	FSSAI Lab Manual, Oils and Fats (26)	Qualitative Positive/Negative
   		Insoluble Bromide Test	IS 4276 Annex D	Qualitative Positive/Negative
       		Separated Water	AEC/C/SAP/F-91, Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
   	 	Added Colouring Substance/Matter	FSSAI Lab Manual, Oils and Fats (4)	Qualitative Present/Absent
   	   	Test for Hydrocyanic Acid	FSSAI Lab Manual, Oils and Fats (32)	Qualitative Present/ Absent
   	   	Oryzonal Content (in Rice Bran oil)	FSSAI Lab Manual, Oils and Fats (18), IS 3448	0.5 to 2%
		Tea Seed oil in olive oil	FSSAI Lab Manual, Oils and Fats (24)	Qualitative Positive /Negative

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	   	Colour Value by Lovibond Tintometer	IS 548 (Part 1)	5 to 50
       		Test for Presence of Animal Body Fat in Vegetable Fat	FSSAI Lab Manual, Oils and Fats (22)	Qualitative Present or Absent
   	   	Total Polar Compounds	AOAC Method no. 982.27, Ch-41, Page no. 31	5 to 30 g/100g %
3.	Fruit & Fruit Products, Vegetable &	Added Wax Coating	AEC/C/SAP/F-128, Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
       	Vegetable Products including Canned	Damaged matter	AEC/C/SAP/F-48, Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
       	and Processed Foods, Jams, Juices,	Rotting	AEC/C/SAP/F-129, Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
     	Sauces and Concentrates, Coconut and	Rodent Contamination	AEC/C/SAP/F-56, Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
	Coconut Products	Soluble Solids (Total)	FSSAI Lab Manual, Fruits and Vegetable Products (1.6, 2.2, 2.12, 3.1, 5.1,6.2, 8.1, 9.1, 11.1,12.1, 13.1, 15.1) AOAC Method no.932.14, Ch-37 IS 13815 /ISO 2173 AOAC Method no. 932.12, Ch-37, Page no. 7	0.1 to 90 g/100g or 100 ml(%)
             		Salt (Sodium Chloride in brine)	FSSAI Lab Manual, Fruits and Vegetable Products (1.7, 12.1, 13.1, 18.2) IS 2860	0.1 to 20 g/100g or 100   ml(%)

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		Total Solids	FSSAI Lab Manual, Fruits and Vegetable Products (2.1, 14.3) AOAC Method no. 920.151, Ch-37	1 to 90 g/100g or 100 ml (%)
             		Insoluble/Extraneous Matter	FSSAI Lab Manual, Fruits and Vegetable Products (2.1) AOAC Method no.922.10, Ch-37	0.1 to 10 g/100g or 100 ml(%)
         		pH	FSSAI Lab Manual, Fruits and Vegetable Products (2.3,11.1,15.2,19.2), IS 2860	2 to 10
		Acidity (as citric acid, tartaric acid)	FSSAI Lab Manual, Fruits and Vegetable Products (2.4, 18.3, 19.3) AOAC Method no.942.15, Ch-37, IS 2860 IS 13844	0.1 to 10 g/100g or 100 ml(%)
       		Added Sugar (Total)	FSSAI Lab Manual, Fruits and Vegetable Products (2.6)	0.1 to 70 g/100g or 100 ml(%)
       		Vitamin C (Ascorbic Acid)	FSSAI Lab Manual, Fruits and Vegetable Products (2.8)	10 to 900 mg/kg
		Mineral Impurities	FSSAI Lab Manual, Fruits and Vegetable Products (2.10), IS:13816 / ISO 762	5 to 50 mg/kg
         		Moisture	FSSAI Lab Manual, Fruits and Vegetable Products (4.1) AOAC Method no.934.06, Ch-37	1 to 98 g/100g or 100ml(%)

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		Ash Insoluble in Dilute HCl	FSSAI Lab Manual, Fruits and Vegetable Products (5.3, 7.2 13.2, 17.4), 2016 IS 13846/ ISO 763	0.01 to 10 g/100g or 100 ml(%)
		Total Ash	FSSAI Lab Manual, Fruits and Vegetable Products (11.3, 14.4, 17.3) IS 13846/ ISO 763 AOAC Method no.950.49 ,Ch-40, AOAC, Method no.940.26, Ch-37 AOAC Method no.930.35, Ch-43	0.1 to 10 g/100g or 100 ml(%)
     	     	Nitrogen	FSSAI Lab Manual, Fruits and Vegetable Products (14.9)	0.1 to 10 g/100g or 100 ml(%)
     		Volatile Acids	FSSAI Lab Manual, Fruits and Vegetable Products (2.5)	0.1 to 10 g/100g or 100ml (%)
   	<del>                                     </del>	Malic Acid	AOAC Method no.995.06, Ch-37	3 mg/l to 20 g/l
	       	Water Capacity of the Container	FSSAI Lab Manual, Fruits and Vegetable Products (1.3)	10 to 100 g/100g(%)
		Drained Weight	FSSAI Lab Manual, Fruits and Vegetable Products (1.4,18.1) IS 2860	10 to 100 g/100g(%)
		Fat	AOAC Method no.950.54,Ch-43	0.01 to 15 g/100g(%)
		Total soluble solids free of added salts or Salt free basis	FSSAI Lab Manual, Fruits and Vegetable Products (2.1)	0 to 90 g/100g(%)

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		Starch	FSSAI Lab Manual, Fruits and Vegetable Products (7.3)	1 to 50 g/100g(%)
       		Mineral acid 	FSSAI Lab Manual, Fruits and Vegetable Products (14.6), 2016	Qualitative Present/Absent
       		Foreign matter in table olives	FSSR 2011 (2.3.44) AEC/C/SAP/F-58 Issue no.: 04, Issue date: 01.04.2018	1 to 99 unit/kg
   		Foreign Substances	AEC/C/SAP/F-52 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
		Hydrocyanic acid	FSSAI Lab Manual, Fruits and Vegetable Products (32), Page No 74, 2016	Qualitative Present/Absent
			AEC/C/SAP/F-136, Issue No. 04, Issue Date: 01.04.2018	0.01 to 10 mg/kg
		Brix	FSSAI Lab Manual, Fruits and Vegetable Products (1.6), IS 13185	0 to 90
         		Test for presence of peroxidase	FSSAI Lab Manual, Fruits and Vegetable Products (17.5),	Qualitative Positive/ Negative
   		Sorbic Acid	FSSAI Lab Manual, Food Additive (2.2.2)	0.2 to 10 %
		Density	AEC/C/SAP/F-137,Issue No. 04, Issue date: 01.04.2018	0.5 to 5 g/cm <sup>3</sup>
	Cocoa beans	Insect Fragments	AEC/C/SAP/F-139 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/ Absent
       		Broken Beans	AEC/C/SAP/F-139 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/ Absent

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		Pieces of Shell	AEC/C/SAP/F-139 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/ Absent
		Living Insects	AEC/C/SAP/F-139 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/ Absent
     		Moldy Beans	AEC/C/SAP/F-139 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/ Absent
     		Salty Beans	AEC/C/SAP/F-139 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/ Absent
       		Insect Damaged	AEC/C/SAP/F-139 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/ Absent
     		Germinated and Flat Beans	AEC/C/SAP/F-139 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/ Absent
       		Flavour	AEC/C/SAP/F-139 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/ Absent
     		Added Colouring Matter	AEC/C/SAP/F- 131, Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/ Absent
     	Table Olives	Sodium chloride in Brine	FSSAI Lab Manual, Fruits and Vegetable Products (19.1)	0.1 to 25 g/100g
		pH of Brine	FSSAI Lab Manual, Fruits and Vegetable Products (19.2)	2 to 10
	       	Acidity of Brine	FSSAI Lab Manual, Fruits and Vegetable Products (19.3)	0.1 to 10 g/100g

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4.	Nut and nut products Oil Seeds & by products	Moisture	AOAC, 20 <sup>th</sup> Ed.,2016, Method no.925.40,Ch-40 FSSAI Lab Manual, Fruits and Vegetable Products (20.1)	1 to 15 g/100 g (%)
		Sulphur Dioxide	FSSAI Lab Manual, Fruits and Vegetable Products (2.5)	0.005 to 15 g/100g(%)
		Crude Fat (Oil content)	AOAC Method no.948.22,Ch-40	0.01 to 15 g/100g(%)
		Peroxidase	FSSAI Lab Manual, Fruits and Vegetable Products (17.5)	Qualitative Present/Absent
		Extraneous vegetable matter in Dates	FSSR 2011 (2.3.47.4) AEC/C/SAP/F-39, Issue no.: 04, Issue date: 01.04.2018	0.1 to 99 g/100g(%)  Present/Absent
		Rancidity	AEC/C/SAP/F-40, Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
		Living Insects	IS 1908 AEC/C/SAP/F-41, Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
		Dead Insects	IS 1908 AEC/C/SAP/F-43, Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
		Insect Fragments	IS 1908 AEC/C/SAP/F-44, Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent

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     		Rodent Contamination	IS 1908 AEC/C/SAP/F-45 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
		Damaged Raisins	FSSR (2.3.47.2) AEC/C/SAP/F-46,Issue no.: 04, Issue date: 01.04.2018	1.1 to 99 g/100g(%)  Present/Absent
   	<del> </del>     	Sugared Raisins	FSSR (2.3.47.2) AEC/C/SAP/F-47,Issue no.: 04, Issue date: 01.04.2018	0.1 to 99 g/100g(%)  Present/Absent
		Blemished/Damaged Units	FSSR (2.3.47.4) AEC/C/SAP/F- 48, Issue no.: 04, Issue date: 01.04.2018	0.1 to 99 g/100g (%) Present/Absent
     		Mustiness	AEC/C/SAP/F-97, Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
		Acidity of extracted fat as Oleic acid	FSSAI Lab Manual, Fruits and Vegetable Products (14.4)	0.1 to 5 g/100g(%)
       		Unopened and Opened Shell	AEC/C/SAP/F-132 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
		Empty Shell	AEC/C/SAP/F-132 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
		Flavour&Odour	AEC/C/SAP/F-132 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
		Synthetic Colouring Matter	AEC/C/SAP/F-132 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent

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	 	Insect Infestation	AEC/C/SAP/F-132 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
		Fissures and Shrinkage	AEC/C/SAP/F-132 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
		Hollow	AEC/C/SAP/F-132 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
     	     	Damaged by Moulds and Insects	AEC/C/SAP/F-132 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
     	     	Added Colouring Matter	AEC/C/SAP/F- 131 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
       	Raisins	Foreign Matter (other than stick)	AEC/C/SAP/F-133 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
     	†	Cap stem	AEC/C/SAP/F-133 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
     	     	Impurities	AEC/C/SAP/F-133 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
       		Glass	AEC/C/SAP/F- 133 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
	       	Stones	AEC/C/SAP/F-133 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
	         	Molded Berries	AEC/C/SAP/F-133 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent

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		Shrivelled Berries	AEC/C/SAP/F-133 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
5.	Cereal and Cereal Products, Pulses	Mineral matter	FSSAI Lab Manual, Cereal and Cereal Products (1.3)	0.01 to 0.5 g/100 g(%)
       	and Pulse Products	Kesari Dal	AEC/C/SAP/F-96, Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
	 	Argemone seeds	AEC/C/SAP/F-63 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
   !	 	Total foreign matter	AEC/C/SAP/F/62 Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
 		Impurities of animal origin	FSSAI Lab Manual, Cereal and Cereal Products (5)	0.01 to 0.5 g/100 g(%)
	 	Foreign Matter (Extraneous Matter)	FSSAI Lab Manual, Cereal and Cereal Products (1.2),	0.1 to 99 g/100g(%)
   	<del> </del>	Shriveled Grains	IS 4333 (Part 1) IS 4333 (Part 1)	Present/Absent 0.1 to 99 g/100g(%) Present/Absent
   	<del> </del>	Damaged Grains/ Berries	IS 4333 (Part 1)	0.1 to 99 g/100g (%) Present/Absent
	 	Insect damaged Grains/ Weevilled Grains	IS 4333 (Part 1)	0.1 to 99 g/100g(%) Present/Absent
 		Mass of 1000 grains	IS 4333 (Part 4)/ ISO 520	1 to 150 g/1000 grains
		Moisture	FSSAI Lab Manual, Cereal and Cereal Products (2, 8.1, 16.1), IS 1155 IS 4333 (Part 2) AOAC Method no. 925.10, Ch-32, AOAC Method no. 945.39, Ch-32, IS 15271	1 to 20 g/100g(%)

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		Total Ash	FSSAI Lab Manual, Cereal and Cereal Products (8.2), IS 1155 AOAC Method no. 923.03, Ch-32,	0.01 to 10 g/100g(%)
         		Gluten (in wheat flour)	FSSAI Lab Manual, Cereal and Cereal Products (8.4, 10.1), IS 1155	0.2 to 20 g/100g(%)
		Ash Insoluble in dil. HCl	FSSAI Lab Manual, Cereal and Cereal Products (8.3), IS 1155, IS 1011 IS 15271	0.002 to 10 g/100g(%)
   		Alcoholic Acidity (With 90% alcohol)	FSSAI Lab Manual, Cereal and Cereal Products (8.5), IS 1155	0.02 to 2 g/100g(%)
         		Nitrogen/Protein	FSSAI Lab Manual, Cereal and Cereal Products (8.7), IS 7219, AOAC Method no.920.87, Ch-32	0.1 to 50 g/100g(%)
		Fat	AOAC Method no.922.06, Ch-32 IS 15271	0.02 to 10 g/100g(%)
		Crude Fibre	FSSAI Lab Manual, Cereal and Cereal Products (8.8), 2016 IS 1155: 1968 IS 10226 (Part I)	0.2 to 5 g/100g(%)
		Total Solids	FSSAI Lab Manual, Cereal and Cereal Products (17.1.4)	1 to 99 g/100g(%)
		Rodent Hair and Excreta	FSSAI Lab Manual, Cereal and Cereal Products (7.5), AEC/C/SAP/F-60, Issue	Present/Absent

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   		 	no.: 04, Issue date: 01.04.2018	
       		Calcium Carbonate	FSSAI Lab Manual, Cereal and Cereal Products (8.6), AOAC, 20 <sup>th</sup> Ed.,2016, Method no.944.03, Ch-32	0.1 to 5 mg/100g
		Uric acid	FSSAI Lab Manual (3), IS 4333 (Part 5) AOAC Method no.970.24, Ch-32	4 to 200 mg/kg
   	<del> </del>	Potassium Bromate	AOAC Method no. 956.03, Ch-32, Page no. 20	1 to 50 mg/kg
     		Total Ash excluding salt /Total Ash excluding added common salt	FSSAI Lab Manual, Cereal and Cereal Products (16.2),	0.05 to 5 g/100g(%)
   	   	Cocoa powder (in malted foods)	FSSAI Lab Manual, Cereal and Cereal Products (17.2),	0.1 to 10 g/100g(%)
		Acidity of extracted fat (as oleic acid)	FSSAI Lab Manual, Cereal and Cereal Products (14.5), IS 1011, IS 15271:	0.1 to 5 g/100g(%)
     		Microscopic Determination	FSSAI Lab Manual, Cereal and Cereal Products (13), IS 2400	Qualitative
     	     	Blemishes	AEC/C/SAP/F-68, Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
	   	Peroxidase Test	FSSAI Lab Manual, Cereal and Cereal Products (17.5),	Qualitative Present/Absent
   	   	Other edible grains	IS 4333(Part I)	0.1 to 99 g/100g (%) Present/Absent
		Insects/larvae	AEC/C/SAP/F-69, Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent

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	       	Broken Grains	AEC/C/SAP/F-135, Issue no.: 04, Issue date: 01.04.2018	Qualitative
	     	Added Colouring Matter	AEC/C/SAP/F- 131, Issue no.: 04, Issue date: 01.04.2018	Qualitative
	     	Melamine	AEC/C/SAP/INS/1-6, Issue No.04, Issue date: 01.04.2018	0.01 to 5 mg/kg
6.	Bakery Products	Moisture	IS 12711 FSSAI Lab Manual	0.5 to 10 g/100g(%)
		Total Ash	IS 12711	0.05 to 5 g/100g(%)
		Ash Insoluble in dil. HCl	IS 12711 FSSAI Lab Manual	0.05 to 5 g/100g(%)
	   	Alcoholic Acidity (With 90% alcohol)	IS 12711 FSSAI Lab Manual	0.02 to 2 g/100g(%)
	   	Fat	IS 12711	0.5 to 60 g/100g(%)
	<del> </del>	Crude Fibre	IS 12711	1 to 20 g/100g(%)
		Total Solids	IS 12711	1 to 99 g/100g(%)
	<del> </del>	pH	IS 12711	2 to 10
		Acidity of extracted fat (as oleic acid)	IS 12711	0.1 to 5 g/100g(%)
	     	Insect/Insect Fragments	AEC/C/SAP/F-70, Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
	 	Larvae	AEC/C/SAP/F-65, Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
	       	Dirt	AEC/C/SAP/F-66, Issue no.: 04, Issue date: 01.04.2018\	Qualitative Present/Absent

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		Rodent Hair	AEC/C/SAP/F-67, Issue no.: 04, Issue date: 01.04.2018	Qualitative   Present/Absent
7.	Meat and Meat Products Poultry and Poultry Products	Total Foreign Matter	AEC/C/SAP/F-58, Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
	   	Moisture	AOAC Method no. 950.46, Ch-39	10 to 90 g/100g(%)
	 	Ash	AOAC Method no.920.153, Ch-39	0.5 to 10 g/100g(%)
	†	Protein (N x 5.80)	FSSAI Lab. Manual (2.2), IS 7219:	0.1 to 50 g/100g(%)
	   	Fat	FSSAI Lab Manual 6 (2.1), 2016	0.5 to 50 g/100g(%)
	T	Energy	Codex Alimentarius, 3.3.1,1985	1 to 1000kcal/100g
8.	Sweets and Confectionery Products	Moisture	DGHS Lab Manual 4 (13.7, 14.2, 15.2), IS 1163, IS 6287	0.5 to 10 g/100g(%)
	(Including Ice Lollies or Edible	Ash	DGHS Lab Manual 4 (7.3, 9.3), IS 6287	0.05 to 5 g/100g(%)
	Ices and Ice   Candy)	Sulphated Ash	DGHS Lab Manual 4 (13.2), IS 6287	0.05 to 50 g/100g(%)
	†   	Sulphated Ash (on salt free basis)	DGHS Lab Manual 4 (13.2A), IS 6287	0.05 to 5 g/100g(%)
	       	Ash Insoluble in dilute Hydrochloric acid	DGHS Lab Manual 4 (13.3, 14.3) IS 1163	0.05 to 5 g/100g(%)
	   	Total Protein	DGHS Lab Manual 4 (13.4),	0.1 to 20 g/100g(%)

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	T	T	IS 6287	
		Fat content	DGHS Lab Manual 4 (13.5B, 15.6, 15.3) IS 1163, IS 6287	0.5 to 50 g/100g(%)
	<u> </u>	Total Reducing Sugar	DGHS Lab Manual 4 (6.4),	0.1 to 80 g/100g(%)
	<del> </del>   	Sucrose content	DGHS Lab Manual 4 (6.4,13.6), 2005	10 to 100 g/100g(%)
	   	Gum	DGHS Lab Manual 4 (14.6),	0.02 to 50 g/100g(%)
		Cocoa Solids	DGHS Lab Manual 4 (15.7), AOAC Method no. 931.05, Ch-31, Page no. 9	0.1 to 50g/100g(%)
	   	Gum in Chewing gum & Bubble gum	DGHS Lab Manual 4 (14.6),	0.1 to 50 g/100g
		Moisture in Chewing gum  & Bubble gum	DGHS Lab Manual 4 (14.2),	0.5 to 10 g/100g
	     	Sulphated Ash in Chewing gum & Bubble gum	DGHS Lab Manual 4 (14.4),	0.1 to 50 g/100g
	     	Acid insoluble Ash in Chewing gum & Bubble gum	DGHS Lab manual 4 (14.3),	0.1 to 50 g/100g
		Reducing Sugars in Chewing gum & Bubble gum	DGHS Lab Manual 4 (14.7),	0.1 to 80 g/100g
	   	Sucrose in Chewing gum & Bubble gum	DGHS Lab Manual 4 (14.7),	5 to 100 g/100g
9.	Honey and Honey Products	Foreign Matter	FSSR 2011(2.8.3) AEC/C/SAP/F-82, Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
		Specific Gravity	IS 4941	0.5 to 1.5
	 	Moisture	IS 4941	0.1 to 40 g/100g(%)

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	<u> </u>	T	DGHS Lab Manual 4 (6.3)	
       		Total Reducing Sugars	IS 4941 DGHS Lab Manual 4 (6.4), AOAC Method no. 920.183, Ch-44	0.5 to 90 g/100g(%)
   	<del> </del>	Reducing Sugars	IS 4941, DGHS Lab Manual 4 (6.4)	1 to 70 g/100g(%)
		Sucrose	IS 4941 IS 4941  DGHS Lab Manual 4 (6.4, 7.4, 8.2),  AOAC, 20 <sup>th</sup> Ed.,2016, Method no. 920.184, Ch-44	1 to 30 g/100g(%)
   	<del> </del>   	Fructose/Glucose ratio	IS 4941 DGHS Lab Manual 4 (6.5),	0.1 to 10
         		Acidity (Expressed as formic acid)	IS 4941:1994, RA 2008, Amds.1 DGHS Lab Manual 4 (6.8), 2005	0.05 to 2.0 g/100g(%)
		Ash	IS 4941 AOAC Method no. 920.181, Ch-44 DGHS Lab Manual 4 (6.7, 7.3, 9.3)	0.1 to 10 g/100g (%)
   	<del> </del>   	Fiehe's Test	IS 4941 DGHS Lab Manual 4 (6.6),	Qualitative Positive/Negative
	<u> </u>	Optical Density	IS 4941	0.01 to 0.5 %
   	<del> </del>	Hydrocyanic acid	FSSAI Lab Manual (32),	Qualitative Present/Absent
	<u> </u>	Refractive Index	IS 4941	1.3 to 1.9
     		Fragments of bees & other insects	AEC/C/SAP/F-83, Issue no.: 04, Issue date: 01.04.2018	Qualitative Present/Absent
 	<del> </del>	Hydroxy Methyl furfural	AOAC 980.23, Chapter 32, Page no. 44	0.5 to 100 mg/kg

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       		Added Colouring Matter	AEC/C/SAP/F- 131, Issue no.: 04, Issue date: 01.04.2018	Qualitative
10.	Sugar and Sugar Products including Jaggery	Dirt	FSSR 2011 (2.8.1 ) AEC/C/SAP/F-77,Issue no.: 04, Issue date: 01.04.2018	Qualitative (Present/ Absent)
         	       	Filth	FSSR 2011 (2.8.3.1) AEC/C/SAP/F-78, Issue no.: 04, Issue date: 01.04.2018	Qualitative (Present/Absent)
       	         	Iron Filings	FSSR 2011(2.8.1) AEC/C/SAP/F-79, Issue no.: 04, Issue date: 01.04.2018	Qualitative (Present/Absent)
     	     	Moisture	DGHS Lab. Manual 4 (7.2), 2005 IS 6287, IS 15279	0.05 to 10 g/100g(%)
   	†	Sucrose	DGHS Lab. Manual 4 (7.4), IS 6287, IS 15279	10 to 100 g/100g(%)
   	   	Total Ash	DGHS Lab. Manual 4 (7.3, 9.3), IS 6287	0.01 to 5g/100g(%)
	   	Ash insoluble in dilute Hydrochloric acid	DGHS Lab. Manual 4 (1.5), IS 6287	0.01 to 5 g/100g(%)
 	 	Conductivity Calcium Oxide	DGHS Lab. Manual 4(7.6), DGHS Lab. Manual 4 (7.7),	1 to 500 micromhos/cm 0.1 to 100 mg/100g
   	<del> </del>	Total Starch	DGHS Lab. Manual 4 (11), IS 15279	0.5 to 20 g/100g(%)
   	   	Sulphated Ash	DGHS Lab. Manual 4 (10, 13.2) IS 6287	0.01 to 5 g/100g(%)
 	 	Glucose in Honey Colour	DGHS Lab. Manual 4 (6.5), IS 15279	20 to 100 g/100g(%) 1 to 200 ICUMSA Colour units

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	     	Extraneous matter (Insoluble matter) in Jaggery, Sugar	DGHS Lab. Manual 4 (9.2), IS 15279	0.001 to 10 g/100g(%)
		Polarization in Sugar	IS 16079  AEC/F/SAP/F-137, Issue  No. 04, Issue Date:  01.04.2018	70 to 99.9 g/100g(%)
11.	Spices, Condiments and their products	Rancidity	AEC/C/SAP/F-40, Issue no.: 04, Issue date: 01.04.2018	Qualitative (Present/Absent)
	(Whole and Ground Spices)	Living and dead insects	IS 3576, IS 2477 IS 3795, IS 1908, IS 3796, IS 3797, IS 1798 AEC/C/SAP/F-8, Issue no.: 04, Issue date: 01.04.2018	Qualitative (Present/Absent)
		Insect Fragments	IS 3576, IS 2477, IS 3795, IS 1908, IS 3796, IS 3797 IS 1798, AEC/C/SAP/F-9, Issue no.: 04, Issue date: 01.04.2018	Qualitative (Present/Absent)
		Rodent Contamination	IS 3576, IS 2477, IS 3795, IS 1908, IS 3796, IS 3797, IS 1798 AEC/C/SAP/F-10,Issue no.: 04, Issue date: 01.04.2018	Qualitative (Present/Absent)
		Extraneous Matter	IS 3576, IS 2477, IS 3795 IS 1908, IS 3796 IS 3797, IS1798 IS 1907, IS 1797 AEC/C/SAP/F-12,Issue no.: 04, Issue date: 01.04.2018	Present/Absent  0.1 to 99 g/100g(%)

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 	 	Foreign Vegetable Matter	IS 1908 AEC/C/SAP/F-13,Issue no.: 04, Issue date: 01.04.2018	Qualitative (Present/Absent)
		Insect damaged Matter	IS 1907, IS 3576, IS 2477 IS 3795, IS 1908, IS 3796 IS 3797, IS 1798 AEC/C/SAP/F-14,Issue no.: 04, Issue date: 01.04.2018	0.1 to 99 g/100g(%) Present/Absent
         		Empty and Malformed capsules by count	IS 1907 AEC/C/SAP/F-15, Issue no.: 04, Issue date: 01.04.2018	1 to 99 % by count
		Immature and Shriveled capsules	IS 1907 AEC/C/SAP/F-16, Issue no.: 04, Issue date: 01.04.2018	0.1 to 99 g/100g(%)  Present/Absent
         		Light Seeds	IS 1907 AEC/C/SAP/F-17, Issue no.: 04, Issue date: 01.04.2018	0.1 to 99 g/100g(%)  Present/Absent
       	         	Unripe and Marked Fruit	FSSR (2.9.3.1) AEC/C/SAP/F-18, Issue no.: 04, Issue date: 01.04.2018	0.1 to 99 g/100g(%)  Present/Absent
         		Tendrils, Mother Cloves	FSSR (2.9.6.1) AEC/C/SAP/F-20, Issue no.: 04, Issue date: 01.04.2018	0.1 to 99 g/100g(%)  Present/Absent
		Khokar Cloves	FSSR (2.9.6.1) AEC/C/SAP/F-21, Issue no.: 04, Issue date: 01.04.2018	0.1 to 99 g/100g(%)  Present/Absent

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       	       	Headless Cloves	FSSR (2.9.6.1) AEC/C/SAP/F-22, Issue no.: 04, Issue date:	1 to 10g/100g(%)  Present/Absent
         	 	Insect damaged cloves	01.04.2018   FSSR (2.9.6.1)   AEC/C/SAP/F-23,   Issue no.: 04, Issue date:   01.04.2018	1 to 10 g/100g(%)  Present/Absent
         		Proportion of edible seeds other than cumin seeds	FSSR 2011(2.9.8.1) AEC/C/SAP/F-25, Issue no.: 04, Issue date: 01.04.2018	Qualitative (Present/Absent)
     		Edible seeds other than cumin black	AEC/C/SAP/F-26, Issue no.: 04, Issue date: 01.04.2018	0.1 to 99 g/100g(%)  Present/Absent
		Defective seeds	IS 3796:2011 AEC/C/SAP/F-27, Issue no.: 04, Issue date: 01.04.2018	0.1 to 99 g/100g(%)  Present/Absent
         		Edible seeds other than fenugreek	IS 3795 AEC/C/SAP/F-28 , Issue no.: 04, Issue date: 01.04.2018	0.1 to 99 g/100g(%)  Present/Absent
         		Light berries	FSSR (2.9.15.1) AEC/C/SAP/F-31, Issue no.: 04, Issue date: 01.04.2018	0.1 to 99 g/100g(%)  Present/Absent
		Pinheads or Broken Berries	FSSR (2.9.15.1) AEC/C/SAP/F-32, Issue no.: 04, Issue date: 01.04.2018	0.1 to 99 g/100g(%) Present/Absent

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         	 	Defective Rhizomes	FSSR 2011(2.9.18.1) AEC/C/SAP/F-33, Issue no.: 04, Issue date:	0.1 to 99 g/100g(%)  Present/Absent
       	 	Damaged Slices In dried Mango Slices	01.04.2018   FSSR (2.9.23.1)   AEC/C/SAP/F-49,   Issue no.: 04, Issue date:   01.04.2018	0.1 to 99 g/100g(%) Present/Absent
         	 	Seed Coatings In dried Mango Slices	FSSR (2.9.23.1) AEC/C/SAP/F-50, Issue no.: 04, Issue date: 01.04.2018	0.1 to 99 g/100g(%)  Present/Absent
       		Broken Berries	FSSR (2.9.25.1) AEC/C/SAP/F-34, Issue no.: 04, Issue date: 01.04.2018	0.1 to 99 g/100g(%)  Present/Absent
         	 	Black Berries	FSSR (2.9.25) AEC/C/SAP/F-35 Issue no.: 04 Issue date: 01.04.2018	0.1 to 99 g/100g(%)  Present/Absent
           	 	Moisture	FSSAI Lab Manual, Spices and Condiments (3,15.4,16.2) IS 1797, AOAC Method no.986.21, Ch-43	5 to 50 g/100g(%)
		Total Ash	FSSAI Lab Manual, Spices and Condiments (4,15.5,16.3) IS 1797, AOAC Method no.941.12, Ch-43	0.5 to 15g/100g(%)
	 	Acid Insoluble Ash	FSSAI Lab Manual, Spices and Condiments (5,15.5,16.3)	0.1 to 10 g/100g(%)

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			IS 1797, AOAC Method no.941.12B	
		Nonvolatile Ether Extract	FSSAI Lab Manual, Spices and Condiments (9) IS 1797, AOAC Method no.940.29	0.5 to 30 g/100g(%)
       		Crude Fibre	FSSAI Lab Manual, Spices and Condiments (11, 15.8), IS 1797	0.5 to 25 g/100g(%)
		Protein	FSSAI Lab Manual, Spices and Condiments (1.7) IS 7219 AOAC Method no.920.165, Ch-43, Page no.2	0.4 to 50 g/100g(%)
		Fat	IS 15271 AEC/C/SAP/F-134, Issue No.: 04, Issue Date: 01.04.2018	1 to 100%
   		Carbohydrate	USFDA Title 21, Food and Drugs,	1 to 100 g/100g(%)
   	   	Energy Value (Calories)	Codex Alimentarius, 3.3.1,	2.5 to 400 kcal/100g
         		Volatile Oil	FSSAI Lab Manual, Spices and Condiments (10) IS 1797, AOAC Method no.962.17, Ch-43	0.5 to 25 g/100g(%)
		Total Starch	FSSAI Lab Manual, Spices and Condiments (16.5), AOAC Method no.940.30, Ch-43	5 to 80 g/100g(%)
       		Salt Capsaicin (in chilly & whole, ground spices)	IS 1797 AEC/C/SAP/INS/1A-4, Issue no.: 04, Issue date: 01.04.2018	0.5 to 10 g/100g(%) 0.1 to 50 g/100g(%)

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		Curcumin Content (in Turmeric)	FSSAI Lab Manual, Spices and Condiments (16.4),	0.1 to 50 g/100g(%)
		Calcium as Calcium oxide on dry basis	FSSAI Lab Manual, Spices and Condiments (8),	0.01 to 10 g/100g(%)
	   	Solubility in cold water on dry weight basis	FSSAI Lab Manual, Spices and Condiments (6)	0.1 to 90 g/100g(%)
		Test for Lead Chromate	FSSAI Lab Manual, Spices and Condiments (16.6)	Qualitative Positive/Negative
	 	Peroxidase test	FSSAI Lab Manual, Spices and Condiments (17.5),	Qualitative Positive/Negative
		Microscopic Determination	Pearson's Composition and Analysis of Foods, Page no. 400,	Qualitative
	     	Insect Infestation	AEC/C/SAP/F-36 Issue no.: 04, Issue date: 01.04.2018	Qualitative (Present/Absent)
		Mustiness	AEC/C/SAP/F-37 Issue no.: 04, Issue date: 01.04.2018	Qualitative (Present/Absent)
		Split Fruits	AEC/C/SAP/F-38 Issue no.: 04, Issue date: 01.04.2018	Qualitative (Present/Absent)
		Inorganic bromide (determined and expressed as total bromide from all sources)	IS 14626	1 to 20 mg/kg
		Coumarin content in Cinnamon and Cassia	AEC/C/SAP/INS/1A-15 , Issue No.: 04, Issue Date: 01.04.2018	0.1 to 5 %
		Piperine in spices	FSSAI Lab Manual, Spices and Condiments (14.3)	0.1 to 20 g/100 g(%)
		Bulk Density	IS 1797	0.3 to 0.89 g/l

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	 	Nut meg in mace	AEC/C/SAP/F-29, Issue no.: 04, Issue date:	Qualitative Present/Absent
	<del> </del>	Added Colouring Matter	01.04.2018 AEC/C/SAP/F- 131,	Qualitative
			Issue no.: 04, Issue date:	Present/Absent
	Asafoetida	Moisture	FSSAI Lab Manual, Spices and Condiments (16.1) IS 7807	0.5 to 20 g/100g(%)
	       	Ash Insoluble in Dil. HCl	FSSAI Lab Manual, Spices and Condiments, (16.3) IS 7807	0.1 to 5 g/100g(%)
	     	Alcoholic Extract	FSSAI Lab Manual, Spices and Condiments, (17.3) IS 7807	0.1 to 20g/100g(%)
	     	Total Ash	FSSAI Lab Manual, Spices and Condiments (16.3) IS 7807	0.5 to 50 g/100g(%)
	<del> </del>	Starch	FSSAI Lab Manual, Spices and Condiments, (16.5)	0.5 to 25 g/100g(%)
	   	Colophony Resin	IS 7807:1975, RA 2009	Qualitative Present/Absent
	 	Galbanum Resin	IS 7807	Qualitative Present/Absent
	 	Ammoniaccum Resin	IS 7807	Qualitative Present/Absent
		Any other Resin	IS 7807	Qualitative Present/Absent
	Saffron	Extraneous Matter	FSSAI Lab Manual, Spices and Condiments (15.2)	0.1 to 99 g/100g
	 	Floral Waste	FSSAI Lab Manual, Spices and Condiments (15.3)	0.1 to 15 g/100g
	<u> </u>	Moisture & Volatile Matter	FSSAI Lab Manual, Spices	0.5 to 50 g/100g

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at 103°C and Condiments (15.4)  Total Ash on dry basis FSSAI Lab Manual, Spices 0.5 to 15 g/10	
and Condiments (15.5)	0g
Ash insoluble in dil. HCI FSSAI Lab Manual, Spices 0.1 to 10 g/10 on dry basis and Condiments (15.5)	0g
Solubility in cold water on   FSSAI Lab Manual, Spices   1 to 100 g/100   dry basis (211 nm)   and Condiments (6)	)g(%)
Bitterness expressed as a FSSAI Lab Manual, Spices 10 to 90 g/100 direct reading and Condiments (15.6)	)g
Safranal expressed as FSSAI Lab Manual, Spices 1 to 50 g/100g direct reading of abs. of and Condiments (15.6)	]
Colouring Strength FSSAI Lab Manual, Spices 40 to 190 g/10 expressed as direct and Condiments (15.6) reading of abs. of 440 nm on dry basis	00g
Crude Fiber on dry basis FSSAI Lab Manual, Spices 0.5 to 25 g/10 and Condiments (15.8) IS 10226 ( Part 1)	0g
Total Nitrogen on dry FSSAI Lab Manual, Spices 0.4 to 10 g/10 basis and Condiments (15.7),2016 IS 7219: 1973	0g
<b>12.</b> Salt (Edible Moisture IS 7224, IS 253 0.1 to 10 g/10	 0g(%)
common salt and   Total Chloride/Sodium   IS 7224, IS 253   1 to 100 g/100   Iodized salt)   Chloride	)g(%)
Matter insoluble in water IS 7224, IS 253 0.01 to 10 g/1	00g(%)
Matter soluble in water IS 7224, IS 253 0.01 to 10 g/1 other than Sodium Chloride	00g(%)
lodine content IS 7224 1 to 50 mg/kg	
Water Soluble Calcium IS 253 0.05 to 10 g/1	
Water Soluble Magnesium IS 253 0.1 to 10 g/10	
Alkalinity IS 253 0.01 to 10 g/1	

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	T	Sulphate	IS 253	0.1 to 10 g/100g (%)
	<del> </del>	Potassium	IS 253	0.1 to 10 g/100g(%)
13.	Tea and Tea Products Coffee, Chicory, Cocoa and Products	Water Extract	IS 13862 / ISO 9768 AOAC Method no. 920.104, Ch-30 FSSAI Lab Manual (Part A-1.7, 2.5, 5.6)	5 to 60 g/100g(%)
		Total Ash	IS 13854/ ISO 1575 AOAC Method no. 920.100A, Ch-30	1 to 15 g/100g(%)
		Water Soluble Ash in Total Ash/Water Soluble Ash	IS 13855 / ISO 1576 AOAC Method no. 920.100B, Ch-30, FSSAI Lab Manual (1.4, 5.4),	1 to 80 g/100g(%)
		Alkalinity of Water Soluble Ash	IS 13856/ ISO 1578 AOACMethod no. 920.100C, Ch-30, FSSAI Lab Manual (1.6, 5.7)	0.1 to 10 g/100g(%)
	<del> </del>	Catechins in Tea	IS 2962	0.1 to 30 %
	       	Added Colouring Matter	AEC/C/SAP/F- 131 Issue no.: 04, Issue date: 01.04.2018	Qualitative
		Acid Insoluble Ash	IS 13857 / ISO 1577 AOAC Method no. 920.100E, Ch-30 FSSAI Lab Manual (1.5, 2.4, 4.5, 5.5)	0.1 to 5 g/100g(%)
		Crude Fibre	IS 10226 (Part I), /ISO 5498 AOAC Method no. 920.102, Ch-30, FSSAI Lab Manual	1 to 50 g/100g(%)

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	<u> </u>	Ţ	(5.8),	
		Water Insoluble Ash	IS 13855 / ISO 1576 AOAC Method no. 920.100B, Ch-30 FSSAI Lab Manual (1.4, 5.4)	0.1 to 5 g/100g(%)
		Loss in Mass (Moisture)	IS 13853/ISO 1573 AOAC Method no. 925.19, Ch-30, FSSAI Lab Manual (1.2, 2.2, 3.1, 4.2, 5.2)	1 to 15 g/100g(%)
		Lead	IS 12074 AOAC Method no.999.11, Ch-9, FSSAI Lab Manual	0.2 to 100 mg/kg
		Copper	FSSAI Lab Manual IS 11123 AOAC Method no.971.20, Ch-9	0.2 to 100 mg/kg
		Caffeine	FSSAI Lab Manual (1.8, 2.7, 3.3) AOAC Method no.969.15(E), Ch-30	10 to 1000 mg/kg
	<del> </del>	Iron filings	FSSAI Lab Manual (5.9)	Present/Absent
		Extraneous Matter	AEC/C/SAP/F-44, Issue no.: 04, Issue date: 01.04.2018	Present/Absent
	     	Mustiness	AEC/C/SAP/F-119, Issue no.: 04, Issue date: 01.04.2018	Present/Absent
		Living & Dead Insects	AEC/C/SAP/F-23, Issue no.: 04, Issue date: 01.04.2018	Present/Absent
		Insects fragments	AEC/C/SAP/F-26, Issue no.: 04, Issue date: 01.04.2018	Present/Absent

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		Rodent Contamination	AEC/C/SAP/F-27, Issue no.: 04, Issue date: 01.04.2018	Present/Absent
14.	Alcoholic Drinks & Beverages (Including	Reducing Residual Sugar pH	IS 7585 IS 7585, IS 3865, AOAC 945.10,Ch-27, Page no. 7	1 to 175 g/L 2 to 12
	Wine,Beer, Rum, Vodka, Whisky, Gin, Toddy,	Total Acidity /Acids (as Tartaric acid) (as Citric acid)	IS 7585, IS 3752, AOAC Method no. 962.12,Ch-28	0.075 to 100 g/L 100 to 2000 g/100L
	Brandy, Champagne, Tequila, Grape Spirit, Grain	Volatile Acidity (as Acetic acid) Esters	IS 7585, IS 3752 IS 3752	0.03 to 5 g/L 3 to 500 g/100 L 0.1 to 50 g/L
	Spirit, Grain	(as Ethyl acetate) Higher Alcohols (as Amyl alcohol)	IS 3752	10 to 1000 g/100 L 0.1 to 100 g/L 10 to 1000 g/100L
	 	Aldehydes (as Acetaldehyde)	IS 3752, AOAC Method no. 972.08, Ch-26,	0.1 to 5 g/L 10 to 100 g/100 ml 20 to 500 g/100 L
		Total Sulphur dioxide	IS 7585, AOAC Method no. 940.20, Ch-28 AEC/C/SAP/AB-8, Issue no.: 04 Issue date: 01.04.2018	3.2 to 1000 mg/L
	 	Free Sulphur dioxide Copper	IS 7585 IS 7585, IS 6854, IS 3752, AOAC Method no.967.08, Ch-26	1.28 to 500 mg/L 0.04 to 100 mg/L
		Iron	AOAC Method no.970.19, Ch-28	0.08 to 100 mg/L
	 	Extracts (Total Extracts) Tannins	IS 7585 IS 7585	5 to 500 g/L 0.5 to 50 g/L

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 	 <del> </del>			 
     		Methyl Alcohol	IS 3752, IS 3865, AOAC Method no. 958.04, Ch-26	0.1 to 5 g/L 0.1 to 30 g/100 L
             		Alcohol/Ethyl Alcohol	AOAC Method no.920.57, Ch-28, IS 3865, IS 3752 (Pycnometer Method) AOAC Method no.983.13,Ch-28,	1 to 70 g/100 ml
	<del> </del>	Turbidity	AOAC Method no.970.14,Ch-27	0 to 500 NTU
   	   	Malic Acid	AOAC Method no.945.33 & 986.13, Ch-28	3 mg/l to 10 g/L
     	 	Citric Acid	AOAC Method no.945.33 & 986.13, Ch-28	0.01 to 200 g/L
   	 	Colour Intensity	AOAC Method no.976.08,Ch-27	0.1 to 50 units
		Sugar	IS 1162 AOAC Method no.920.51,Ch-27	1 to 30 g/100 ml
	<u> </u>	Residue on Evaporation	IS 3752	0.1 to 30 g/100 ml
 	T	Furfurals	IS 3752	3 to 20 g/100 L
       		Ash	AOAC Method no.920.67,Ch-28 IS 3752	0.1 to 5 g/100 ml
	T	Density	OIV-MA-AS201A	0.5 to 5 g/cm <sup>3</sup>
   		Fat	AOAC Method no.922.06, Ch-32	0.02 to 1 g/100 ml
	   	Protein	IS 7219, AOAC 920.53, Ch-27	0.1 to 1 g/100 ml
	T	Carbohydrate	AOAC 985.10, Ch-28	0.5 to 5 g/100 ml
		Energy value (Calories)	AOAC 979.07, Ch-28, Page no. 6	0.5 to 500 kcal/100 ml

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		Carbon Dioxide	OIV-MA-AS314-01	0.05 to 3.5 g/L
	 	Actual Alcoholic strength	OIV-MA-AS312-01A,	1 to 70 g/100 ml(%)
	 	Specific Gravity	OIV-MA-AS201A	0.5 to 5 g/cm <sup>3</sup>
		Permanganate Reaction Time	IS 6613	1 to 30 min
		Added Colouring Matter	AEC/C/SAP/F- 131, Issue no.: 04, Issue date: 01.04.2018	Qualitative
		Hydrocyanic Acid	AEC/C/SAP/F-136, Issue no.: 04, Issue date: 01.04.2018	0.01 to 10 mg/kg
	     	Melamine	AEC/C/SAP/INS/1-6, Issue No.04, Issue date: 01.04.2018	0.01 to 5 mg/kg
		Lead	AOAC, 20 <sup>th</sup> Ed.,2016, Method no.984.27 & 2011.14, Ch-50, AEC/C/SAP/INS/3-4 Issue no.04, Issue date:01.04.2018	0.01 to 100 mg/kg or mg/l
		Cadmium	AOAC Method no.984.27 & 2011.14, Ch-50, AEC/C/SAP/INS/3-4 Issue no.04, Issue date:01.04.2018	0.01 to 100 mg/kg or mg/l
15.	Non-Alcoholic Carbonated Beverages	Caffeine	FSSAI Lab. Manual (3.5.4),	10 to 1000 mg/l
16.	Edible Starches &	Moisture	IS 4706	0.1 to 25%
	Starch Products	Total Ash (on dry basis)	IS 4706	0.1 to 20%
	   	Acid insoluble ash (on dry basis)	IS 4706	0.01 to 2%

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       	Food and	Starch (on dry basis) Protein (on dry basis) Crude fibre (on dry basis) pH of aqueous extract Alcoholic acidity Sulphur Dioxide content Hydrocyanic acid Free acidity Fat	IS 4706 IS 4706 IS 4706 IS 4706 IS 4706 IS 4706 IS 4706 IS 4706 IS 4706 IS 4706	1 to 100 g/100g (%) 1 to 60% 0.1 to 15% 2 to 10 0.01 to 5% 1 to 1000 mg/kg Qualitative Present/Absent 0.1 to 5% 0.1 to 5%
17.                               	Agricultural Products (All categories of food products including Nutraceuticals and Fortified Foods, Instant Mixes and Ready to eat)	Fat                         	FSSAI Lab Manual (4)   IS 2802(Part II), IS 1479   (Part II),   AOAC Method no. 995.,   Ch-33, AOAC Method no.   952.06, Ch-33, AOAC   Method no. 989.05,Ch-33,   AOAC Method no. 938.06,   Ch-33, AOAC 950.54, Ch-   43, AOAC Method   no.922.06, Ch-32,   IS 1163   AEC/F/SAP/F-134,   Issue No. 04, Issue Date:   01.04.2018	0.1 to 50 g/100g or 100     ml
             		Protein	FSSAI Lab Manual (4, 6), IS 7219 AOAC Method no.920.165, Ch-43, AOAC 920.53, Ch- 27, IS 1479 (Part II)	0.1 to 80 g/100g or 100 ml
   		Carbohydrate	USFDA Title 21, Food and Drugs,	1 to 100 g/100g or 100 ml
   		Sugar (Total)	FSSAI Lab Manual (2.6), IS 6287, AOAC Method	0.1 to 40 g/100g or 100 ml

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Ashwamedh Engineers & Consultants, Laboratory Services Division, Survey No. 102, Plot No. 26, Wadala Pathardi Road, Indira Nagar, Laboratory

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	T	Ţ	no.939.03, Ch-32	
   	†	Energy value (Calories)	Codex Alimentarius, 3.3.1	1 to 1000 kcal/100g or 100 ml
		Cholesterol	AOAC Method no.994.10,Ch- 45 AEC/C/SAP/INS/5-18, Issue no.: 04, Issue date: 01.04.2018	≥1mg/100 g or 100 ml
	T	Vitamins		
		Vitamin B1 (Thiamine)	AEC/C/SAP/INS/1A-6, Issue no.: 04, Issue date: 01.04.2018	0.5 to 100 mg/100g or 100 ml
       	 	 	AEC/C/SAP/INS/1-10, Issue no.: 04, Issue date: 01.04.2018	0.025 to 0.2 mg/100g or 100 ml
	       	Vitamin B2 (Riboflavin)	AEC/C/SAP/INS/1A-6, Issue no.: 04, Issue date: 01.04.2018	0.5 to 100 mg/100g or 100 ml
       	 	 	AEC/C/SAP/INS/1-10, Issue no.: 04, Issue date: 01.04.2018	0.025 to 0.2 mg/100g or 100 ml
	 	Vitamin B3 (Niacin)	AEC/C/SAP/INS/1A-6, Issue no.: 04, Issue date: 01.04.2018	0.5 to 100 mg/100g or 100 ml
       	 	 	AEC/C/SAP/INS/1-10, Issue no.: 04, Issue date: 01.04.2018	0.025 to 0.2 mg/100g or 100 ml
	 	Vitamin B6 (Pyridoxine)	AEC/C/SAP/INS/1A-6, Issue no.: 04, Issue date: 01.04.2018	0.5 to 100 mg/100g or 100 ml
	 	 	AEC/C/SAP/INS/1-10,	0.025 to 0.2 mg/100g or

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   	   	   	Issue no.: 04, Issue date: 01.04.2018	100 ml
		Vitamin B12 (Cyanocobalamin)	AEC/C/SAP/INS/1A-14, Issue no.: 04, Issue date: 01.04.2018	0.5 to 100 mg/100g or 100 ml
       	 		AEC/C/SAP/INS/1-10,   Issue no.: 04, Issue date:   01.04.2018	0.025 to 0.2 mg/100g or 100ml
       		Vitamin B9 (Folic acid)	AEC/C/SAP/INS/1A-6, Issue no.: 04, Issue date: 01.04.2018	0.05 to 100 mg/100g or 100 ml
       			AEC/C/SAP/INS/1-10, Issue no.: 04, Issue date: 01.04.2018	0.025 to 0.2 mg/100g or 100ml
           	 	Vitamin C (Ascorbic Acid)	AOAC, 20 <sup>th</sup> Ed.,2016, Method no.985.33, Ch-50 AEC/C/SAP/INS/1A-3, Issue no.: 04, Issue date: 01.04.2018	0.2 to 100 mg/100g or 100 ml
       		Vitamin A (Retinol or B-carotene)	AEC/C/SAP/INS/1A-8 & 9, Issue no.: 04, Issue date: 01.04.2018	0.5 to 100 mg/100g or 100 ml
       	     	Vitamin D3 (Cholecalciferol)	AEC/C/SAP/INS/1A-8, Issue no.: 04, Issue date: 01.04.2018	0.05 to 100 mg/100g or 100 ml
     	       	Vitamin B7 (Biotin)	AEC/C/SAP/INS/1-10, Issue no.: 04, Issue date: 01.04.2018	0.025 to 0.2 mg/100g or 100 ml
     	     	Vitamin B5 (Pantothenic Acid)	AEC/C/SAP/INS/1-10, Issue no.: 04, Issue date: 01.04.2018	0.025 to 0.2 mg/100g or 100 ml
ļ	T	Total Dietary Fiber	AOAC Method No. 985.29,	0.2 to 45 g/100g (%)

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			Chapter 45, Page no. 100	 
	   	Insoluble Dietary Fiber	AOAC Method No. 991.42, Chapter 32, Page No. 5	0.2 to 45 g/100g (%)
		Soluble Dietary Fiber	AOAC Method No. 993.19, Chapter 45, Page No. 102	0.1 to 45 g/100g (%)
		Crude Fiber	FSSAI Lab Manual (8.8), IS 1155, IS 10226 (Part I)	0.2 to 5 g/100g (%)
18.	Edible Oils, Fat &	Fatty Acid Profile		
	Ghee, Milk & Dairy Products, Cereal & Cereal Products, Bakery Products, Fruit &	Saturated Fatty Acids	AOAC Method no.996.06, Ch-41 AEC/C/SAP/INS/5-17, Issue no.: 04, Issue date: 01.04.2018	0.1 to 90 g/100g or 100 ml
	Vegetable Products, Ready to eat, Instant Mixes	Monounsaturated Fatty Acids (MUFA)	AOAC Method no.996.06, Ch-41 AEC/C/SAP/INS/5-17, Issue no.: 04, Issue date: 01.04.2018	0.1 to 90 g/100g or 100 ml
		Polyunsaturated Fatty Acids (PUFA)	AOAC Method no.996.06, Ch-41 AEC/C/SAP/INS/5-17, Issue no.: 04, Issue date: 01.04.2018	0.1 to 90 g/100g or 100 ml
		Trans Fatty Acids	AOAC Method no.996.06, Ch-41 AEC/C/SAP/INS/5-17, Issue no.: 04, Issue date: 01.04.2018	0.1 to 10 g/100g or 100 ml
19.	Edible Oils, Fat & Ghee	Butyric acid methyl ester (C4:0)	AOAC Method no.996.06, Ch-41	0.01 to 25 g/100g (%)
	   	Caproic acid methyl ester (C6:0)	AEC/C/SAP/INS/5-17, Issue no.: 04, Issue date:	0.01 to 5 g/100g (%)
		Caprylic acid methyl ester	01.04.2018	0.01 to 15 g/100g (%)

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   	<del> </del>   	(C8:0)	1   	   
   	T	Capric acid methyl ester (C10:0)	   	0.01 to 15 g/100g(%)
		Undecanoic acid methyl ester (C11:0)	   	0.01 to 100 g/100g (%)
	   	Lauric acid methyl ester (C12:0)	AOAC Method no.996.06, Ch-41	0.01 to 60 g/100g(%)
   		Tridecanoic acid methyl ester (C13:0)	AEC/C/SAP/INS/5-17, Issue no.: 04, Issue date:	0.01 to 50 g/100g(%)
   	   	Myristic acid methyl ester (C14:0)	01.04.2018	0.01 to 25 g/100g(%)
	   	Pentadecanoic acid methyl ester (C15:0)		0.01 to 30 g/100g(%)
   		Palmitic acid methyl ester (C16:0)		0.01 to 50 g/100g(%)
   	<del> </del>	Heptadecanoic acid methyl ester (C17:0)	   	0.01 to 5 g/100g(%)
   	<del> </del>	Stearic acid methyl ester (C18:0)	1   	0.01 to 15 g/100g(%)
   	<del> </del>	Arachidic acid methyl ester (C20:0)	1   	0.01 to 10 g/100g(%)
	<del> </del>   	Heneicosanoic Acid (C21:0)		0.01 to 100 g/100g(%)
   	<del> </del>   	Behenic acid methyl ester (C22:0)		0.01 to 10 g/100g (%)
	<del>                                     </del>	Tricosanoic acid methyl ester (C23:0)		0.01 to 100 g g/100g(%)
	<del>                                     </del>	Lignoceric acid methyl ester (C24:0)		0.01 to 5 g/100g(%)
   	<del>                                     </del>	Monounsaturated Fatty Acids		0.01 to 85 g/100g(%)
	<del> </del>	Myristoleic acid methyl		0.01 to 25 g/100g(%)

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	   	ester (C14:1)	 	
	   	cis-10 Pentadecanoic acid methyl ester (C15:1)		0.01 to 25 g/100g(%)
	   	Palmitoleic acid methyl ester (C16:1)	   	0.01 to 25 g/100g(%)
	   	cis-10 heptadecanoic acid methyl ester (C17:1)	   	0.01 to 5 g/100g(%)
	   	Oleic acid methyl ester (C18:1n9c)	AOAC Method no.996.06, Ch-41	0.01 to 15 g/100g(%)
	   	cis-11 Eicosenoic acid methyl ester (C20:1)	AEC/C/SAP/INS/5-17, Issue no.: 04, Issue date:	0.01 to 10 g/100g(%)
		Erucic acid methyl ester (C22:1n9)	01.04.2018	0.01 to 10 g/100g(%)
		Nervonic acid methyl ester (C24:1)	   	0.01 to 5 g/100g(%)
	 	Polyunsaturated Fatty Acids		
	 	Linoleate acid methyl ester (C18:2n6c)	 	0.01 to 15 g/100g(%)
		Gamma Linolenic acid methyl ester (C18:3n6)	 	0.01 to 15 g/100g(%)
		Linoleate acid methyl ester (C18:3n3)		0.01 to 15 g/100g(%)
	   	cis-11, 14-Eciosadienoic acid methyl ester (C20:2)	   	0.01 to 20 g/100g(%)
	     	cis -11,14, 17- Eicosatrienoic acid methyl ester (C20:3n3)		0.01 to 20 g/100g(%)
	 	cis-8, 11, 14- Eicosatrienoic acid methyl ester (C20:3n6)		0.01 to 20 g/100g(%)
	T	Arachidonic acid methyl		0.01 to 20 g/100g(%)

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   	T	ester (C20:4n6)		
       	     	cis-5,8,11,14,17- Eicosapentaenoic acid methyl ester (C20:5n3)		0.01 to 20 g/100g(%)
   	<del> </del>   	cis-13,16-Docosadienoic acid methyl ester(C22:2)	   	0.01 to 10 g/100g(%)
		cis-4,7,10,13,16,19- Docosahexaenoic acid methyl ester (C22:6n3) Trans Fatty Acids	AOAC Method no.996.06, Ch-41 AEC/C/SAP/INS/5-17, Issue no.: 04, Issue date:	0.01 to 10 g/100g(%)
   	<del> </del>	Elaidic acid methyl ester (C18:1n9t)	01.04.2018	0.01 to 15 g/100g(%)
   	   	Lenolelaidic acid methyl ester (C18:2n6t)	   	0.01 to 15 g/100g(%)
<b>20.</b>	Food for special dietary uses	Total Ash	FSSAI Lab Manual (8.3) IS 1155: 1968, Ed.3.3, RA 2015, Amds.3 AOAC, 20 <sup>th</sup> Ed.,2016, Method no. 923.03, Ch-32	0.01 to 10 g/100g(%)
		Ash Insoluble in dil. HCl (Acid Insoluble Ash)	FSSAI Lab Manual (8.4), 2016 IS 1155: 1968, Ed.3.3, RA 2015, Amds.3 IS 1011:2002 RA 2009 IS 15271:2003 RA 2013, Amds.2	0.002 to 2 g/100g(%)
		Moisture	FSSAI Lab Manual (8.2, 2, 16.1), 2016 IS 1155: 1968, Ed.3.3, RA 2015, Amds.3 IS 4333 (Part 2) AOAC Method no. 925.10, Ch-32, AOACMethod no.	1 to 20 g/100g(%)

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	T		945.39, Ch-32, IS 15271	
		Calcium	AOAC Method no.944.03, Ch-32,	0.1 to 10 g/100g(%)
	   	Loss on Drying	AOAC Method no.934.01, Ch-4,	0.1 to 30 g/100g(%)
		Phosphorous	AOAC Method no.986.24, Ch-50,	0.1 to 20 g/100g (%)
		Protein	IS 7219	0.5 to 50 g/100g(%)
	   	Crude Fibre	DGHS Lab. Manual 3 (8.9), IS 1155, IS 10226(Part I)	0.2 to 5 g/100g(%)
21. a.	Baking Powder	Carbon Dioxide	AEC/C/SAP/F-107, Issue no.: 04, Issue date: 01.04.2018	1 to 50g/100g(%)
b.	Pan Masala	Coal Tar Coloring Matter (Carmosin, Ponceau 4 R, Erythrosin,Brilliant Blue FCF, Tartrazine, Sunset yellow)	FSSAI Lab Manual (8.3),	Qualitative Present/Absent
		Total Ash	FSSAI Lab Manual (8.2)	0.05 to 10 g/100g (%)
		Ash insoluble in dilute HCl	FSSAI Lab Manual(8.3), 2016	0.05 to 5 g/100g (%)
22.	Food Additives (Used as raw material/ ingredient)	Description Appearance, Colour, Flavour	AEC/C/SAP/F-130, Issue no.: 04,Issue date: 01.04.2018	Complies/Does not comply
	Monosodium Glutamate	Chloride Assay	FSSAI Lab Manual,Food Additive (7.4)	0.1 to 0.2 g/100g (%) > or < 0.2 g/100g (%)
	   	Sodium Metabisulphite	IS 4752 JECFA	0.5 to 99.9 %
	   	Calcium Propionate	IS 6031 JECFA	0.5 to 99.9 %
		Sodium Propionate	IS 6030	0.5 to 99.9 %

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	   	   	JECFA	
		Monosodium L-glutamate	IS 9505 JECFA	0.5 to 99.9 %
23.	Food Additives (In Food Products)	Colouring Matter (Carmosin, Ponceau 4 R,Erythrosin, Brilliant Blue FCF, Tartrazine, Sunset yellow)	FSSAI Lab Manual (4.1)	Qualitative Present/Absent
		Erythrosine Sunset Yellow Ponceau 4R Tartrazine Carmosine	FSSAI Lab Manual (4.1) FSSAI Lab Manual (4.1) FSSAI Lab Manual (4.1) FSSAI Lab Manual (4.1) FSSAI Lab Manual (4.1)	1 to 1000 mg/kg (ppm) 1 to 1000 mg/kg (ppm) 1 to 1000 mg/kg (ppm) 1 to 1000 mg/kg (ppm) 1 to 1000 mg/kg (ppm)
 	 	Pea Green Apple Green Brilliant Blue Sulphur Dioxide (Dry Fruit)	FSSAI Lab Manual (4.1) FSSAI Lab Manual (4.1) FSSAI Lab Manual (4.1) FSSAI Lab Manual (1.5 B)	1 to 1000 mg/kg (ppm) 1 to 1000 mg/kg (ppm) 1 to 1000 mg/kg (ppm) 1 to 1000 mg/kg (ppm)
	<del> </del>	Saccharin  Benzoic acid	FSSAI Lab Manual (3.1.1) FSSAI Lab Manual (1.2.1)	Qualitative   Present/Absent   Present/Absent
	 	 	AEC/C/SAP/INS/1A-11, Issue no.: 04,Issue date: 01.04.2018	1 to 1000 mg/kg
	Antioxidants	TBHQ	Handbook of Analysis and Quality Control for Fruit & Vegetable Products, Ranganna AEC/C/SAP/F-87, Issue no.: 04, Issue date: 01.04.2018	10 to 1000 mg/kg
	 	ВНА	FSSAI Lab Manual, Oils	5 to 1000 mg/kg

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	<del>                                     </del>		and Fats (5.2.2)	   
24.	Vinegar	Acidity (As acetic acid)	FSSAI Lab Manual, Oils and Fats (14.5)	1 to 259 g/100g
а.	Synthetic Vinegar	Total Solids	FSSAI Lab Manual, Fruits and Vegetables (14.3)	1 to 99 g/100g
		Total Ash Content	FSSAI Lab Manual, Fruits and Vegetables (14.4)	0.1 to 10 g/100g
		Test for Mineral Acid	FSSAI Lab Manual, Fruits and Vegetables (14.6)	Present/ absent
	 	Test for presence of caramel	FSSAI lab Manual, Fruits and Vegetables (14.7)	Present/Absent
b. 	Brewed Vinegar	Acidity (As acetic acid)	FSSAI Lab Manual, Fruits and Vegetables (14.5)	1 to 50 g/100ml
		Total Solids	FSSAI Lab Manual, Fruits and Vegetables (14.3)	1 to 99 g/100g
	 	Total Ash Content	FSSAI Lab Manual, Fruits and Vegetables (14.4)	0.1 to 10 g/100g
	 	Test for Mineral Acid	FSSAI Lab Manual, Fruits and Vegetables (14.6)	Present/ absent
		Test for presence of caramel	FSSAI lab Manual, Fruits and Vegetables (14.7)	Present/Absent
25.	Plant Material/Tissue &	Total Nitrogen	AOAC Method no.978.04, Ch-2,	0.01 to 15 g/100g
	Herbal/   Medicinal Plants	Phosphorous	WLII, Page no. 59 AEC/C/SAP/F-122, Issue no. 04, Issue date: 01.04.2018	0.1 to 10 g/100g

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		Potassium	AOAC Method no.975.03& 965.09, Ch-3, AEC/C/SAP/NS/4-41, Issue no.04, Issue date:01.04.2018	2 to 200 mg/kg
		Sodium	AOAC Method no.975.03& 965.09, Ch-3, AEC/C/SAP/NS/4-41 Issue no.04, Issue date:01.04.2018	2 to 200 mg/kg
		Iron	AOAC Method no.975.03 & 965.09, Ch-3, AEC/C/SAP/NS/4-41 Issue no.04, Issue date:01.04.2018	4 to 500 mg/kg
           			AOAC Method no.985.01, Ch-3 AEC/C/SAP/NS/3-5, Issue no.04, Issue date:01.04.2018	3 to 500 mg/kg
		Zinc	AOAC Method no.975.03 & 965.09, Ch-3, AEC/C/SAP/NS/4-41, Issue no.04, Issue date:01.04.2018	5 to 500 mg/kg
			AOAC Method no.985.01, Ch-3 AEC/C/SAP/NS/3-5, Issue no.04, Issue date:01.04.2018	0.5 to 500 mg/kg
		Copper	AOAC Method no.975.03 & 965.09, Ch-3, AEC/C/SAP/NS/4-41, Issue no.04, Issue	2 to 500 mg/kg

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	           		date:01.04.2018	
			AOAC Methodno.985.01, Ch-3, AEC/C/SAP/NS/3-5 Issue no.04, Issue date:01.04.2018	0.5 to 500 mg/kg
	         	Cadmium	WHO,1998, Page no.62 AEC/C/SAP/NS/4-41, Issue no.04, Issue date:01.04.2018	5 to 500 mg/kg
			AOAC, Method no.985.01, Ch-3 AEC/C/SAP/NS/3-5 Issue no.04, Issue date:01.04.2018	0.05 to 500 mg/kg
   	   	Sulphur	AOAC, Method no.923.01/ 920.10B, Ch-3,	50 to 5000 mg/kg
   	   	Arsenic	WHO,1998, Page no.61	Qualitative Present/Absent
			AOAC Method no.985.01, Ch-3 AEC/C/SAP/NS/3-5 Issue no.04, Issue date:01.04.2018	0.1 to 100 mg/kg
		Lead	WHO,1998, Page no.62 AEC/C/SAP/NS/4-41, Issue no.04, Issue date:01.04.2018	5 to 500 mg/kg
	   		AOAC Method no.985.01, Ch-3	0.1 to 100 mg/kg

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           			AEC/C/SAP/NS/3-5 Issue no.04, Issue date:01.04.2018	
           		Mercury	AOAC Method no.985.01, Ch-3 AEC/C/SAP/NS/3-5, Issue no.04, Issue date:01.04.2018	0.01 to 50 mg/kg
         	       	Chromium	WHO,1998, Page no. 62 AEC/C/SAP/NS/4-41 Issue no.04, Issue date:01.04.2018	0.2 to 200 mg/kg
           			AOAC Method no.985.01, Ch-3 AEC/C/SAP/NS/3-5, Issue no.04, Issue date:01.04.2018	0.2 to 200 mg/kg
         		Nickel	WHO,1998, Page no. 62 AEC/C/SAP/NS/4-41 Issue no.04, Issue date:01.04.2018	0.1 to 100 mg/kg
			AOAC Method no.985.01, Ch-3 AEC/C/SAP/NS/3-5, Issue no.04, Issue date:01.04.2018	0.5 to 50 mg/kg
VIII.	RESIDUES IN FOOI	PRODUCTS	 	 
1.	Food & Agriculture Products & in Additives	Metals & Minerals Lead	FSSAI Lab Manual (2) AOACMethod no.999.11 & 999.10,Ch-9 AEC/C/SAP/INS/4-37	0.2 to 200 mg/kg or mg/l 0.02 mg/100g to 20 mg/100g or 100 ml

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           	           		Issue no.04, Issue date:01.04.2018 FSSAI Lab Manual, Metals (3.1),	
     			AOAC Method no.984.27 & 2011.14, Ch-50, AEC/C/SAP/INS/3-4	0.05 to 100 mg/kg or mg/l
       	 		lssue no.04, Issue date:01.04.2018 FSSAI Lab Manual,Metals (5),	0.005 mg/100g to 10 mg/100g or 100 ml
		Iron	FSSAI Lab Manual (2) AOAC Method no. 999.11 & 999.10, Ch-9 AEC/C/SAP/INS/4-37 Issue no.04, Issue date:01.04.2018 FSSAI Lab Manual, Metals (3.1)	0.2 to 500 mg/kg or mg/l 0.02 mg/100g to 50 mg/100g or 100 ml
			AOAC Method no.984.27 & 2011.14, Ch-50, AEC/C/SAP/INS/3-4 Issue no.04, Issue date:01.04.2018 FSSAI Lab Manual, Metals (5)	0.1 to 200 mg/kg or mg/l 0.01 mg/100g to 20 mg/100g or 100 ml
		Cadmium	FSSAI Lab Manual (2) AOAC, 20 <sup>th</sup> Ed.,2016, Method no.999.11 & 999.10,Ch-9, AEC/C/SAP/INS/4-37 Issue no.04, Issue date:01.04.2018	0.1 to 100 mg/kg or mg/l 0.01 mg/100g to 20 mg/100g or 100 ml

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	<del> </del>		FSSAI Lab Manual, Metals	 
			(3.1), AOAC Method no.984.27& 2011.14,Ch-50 AEC/C/SAP/INS/3-4, Issue no.04, Issue date:01.04.2018 FSSAI Lab Manual, Metals (5),	0.02 to 100 mg/kg or mg/l 0.002 mg/100g to 10 mg/100g or 100ml
		Copper	FSSAI Lab Manual (2), AOAC Method no. 999.11 & 999.10,Ch-9 AEC/C/SAP/INS/4-37 Issue no.04, Issue date:01.04.2018 FSSAI Lab Manual, Metals (3.1)	0.08 to 100 mg/kg or mg/l 0.008 mg/100g to 20 mg/100g or 100 ml
			AOAC Method no.984.27 & 2011.14,Ch-50, AEC/C/SAP/INS/3-4 Issue no.04, Issue date:01.04.2018 FSSAI Lab Manual, Metals (5), 2016	0.05 to 100 mg/kg or mg/l 0.005 mg/100g to 10 mg/100g or 100 ml
		Chromium	FSSAI Lab Manual (2), AOACMethod no. 999.11 & 999.10,Ch-9 AEC/C/SAP/INS/4-37 Issue no.04, Issue date:01.04.2018	0.1 to 100 mg/kg or mg/l 0.01 mg/100g to 10 mg/100g or 100 ml
	 		AOAC Method no.984.27 & 2011.14, Ch-50 AEC/C/SAP/INS/3-4 Issue no.04, Issue	0.1 to 200 mg/kg or mg/l 0.01 mg/100g to 20 mg/100g or 100 ml

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	       		date:01.04.2018 FSSAI Lab Manual, Metals (5), 2016	
		Nickel	FSSAI Lab Manual (2), AOAC Method no. 999.11 & 999.10,Ch-9 AEC/C/SAP/INS/4-37 Issue no.04, Issue date:01.04.2018	0.1 to 100 mg/kg or mg/l 0.01 mg/100g to 10 mg/100g or 100 ml
			AOAC Method no.984.27& 2011.14, Ch-50, AEC/C/SAP/INS/3-4 Issue no.04, Issue date:01.04.2018 FSSAI Lab Manual, Metals (5), 2016	0.1 to 100 mg/kg or mg/l 0.01 mg/100g to 20 mg/100g or 100ml
		Arsenic	AOAC Method no.986.15 & 999.10, Ch-9, AEC/C/SAP/INS/4-35 Issue no.04, Issue date:01.04.2018	0.1 to 100 mg/kg or mg/l 0.01 mg/100g to 10 mg/100g or 100ml
			AOAC Method no.984.27& 2011.14, Ch-50, AEC/C/SAP/INS/3-4 Issue no.04, Issue date:01.04.2018 FSSAI Lab Manual, Metals (5), 2016	0.05 to 100 mg/kg or mg/l 0.005 mg/100g to 10 mg/100g or 100 ml
		Mercury	FSSAI Lab Manual 9 (2.1), AOAC Method no.971.21& 999.10, Ch-9, (Flameless AAS Method) AEC/C/SAP/INS/4-36 Issue no.04, Issue	0.1 to 100 mg/kg or mg/l 0.001 to 10 mg/100g or 100 ml

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			date:01.04.2018 FSSAI Lab Manual, Metals (3.2)	
             			AOAC Method no.984.27& 2011.14, Ch-50, AEC/C/SAP/INS/3-4Issue no.04, Issue date:01.04.2018	0.01 to 50 mg/kg or mg/l 0.001 to 5 mg /100g or mg/100 ml
     		Tin	FSSAI Lab Manual, Metals (4.1)	10 to 500 mg/kg or mg/l 1 to 50 mg/100g or 100 ml
			AOAC Method no.984.27& 2011.14, Ch-50, AEC/C/SAP/INS/3-4 Issue no.04, Issue date:01.04.2018 FSSAI Lab Manual, Metals (5),	0.05 to 100 mg/kg or mg/l 0.005 to 10 mg/100g or 100ml
		Zinc	FSSAI Lab Manual (2) AOAC, 20 <sup>th</sup> Ed.,2016, Method no.999.11& 999.10, Ch-9, AEC/C/SAP/INS/4-37 Issue no.04, Issue date:01.04.2018 FSSAI Lab Manual, Metals (3.1)	1.0 to 100 mg/kg or mg/l 0.1 to 10 mg/100g or 100 ml
         			AOAC Method no.984.27& 2011.14, Ch-50, AEC/C/SAP/INS/3-4 Issue no.04, Issue	0.1 to 100 mg/kg or mg/l 0.01 to 10mg/100gor 100ml

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			date:01.04.2018 FSSAI Lab Manual, Metals (5)	
 		Calcium	AOAC Method no.984.27 & 2011.14, Ch-50, AEC/C/SAP/INS/3-4 Issue no.04, Issue date:01.04.2018 FSSAI Lab Manual, Metals (5)	10 to 1000 mg/kg or mg/l 1 to 10 mg/100g or 100 ml
		Magnesium	AOAC Method no.984.27 & 2011.14, Ch-50, AEC/C/SAP/INS/3-4 Issue no.04, Issue date:01.04.2018 FSSAI Lab Manual, Metals (5)	10 to 1000 mg/kg or mg/l 1 to 100 mg/100g or 100 ml
		Selenium	AOAC Method no.984.27 & 2011.14, Ch-50, AEC/C/SAP/INS/3-4 Issue no.04, Issue date:01.04.2018	0.05 to 500 mg/kg or mg/l 0.005 to 50 mg/100g or 100 ml
		Sodium	AOAC Method no.984.27 & 2011.14, Ch-50, AEC/C/SAP/INS/3-4 Issue no.04, Issue date:01.04.2018 FSSAI Lab Manual, Metals (5)	10 to 1000 mg/kg or mg/l 1 to 100 mg/100g or 100 ml
   	†	Potassium	AOAC Method no.984.27 & 2011.14,Ch-50,	10 to 10000 mg/kg or mg/l

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			AEC/C/SAP/INS/3-4 Issue no.04, Issue date:01.04.2018 FSSAI Lab Manual, Metals (5)	1 to 1000 mg/100g or 100 ml
             		Manganese	AOAC Method no.984.27 & 2011.14, Ch-50, AEC/C/SAP/INS/3-4 Issue no.04, Issue date:01.04.2018	0.1 to 100 mg/kg or mg/l 0.01 to 10 mg/100g or 100 ml
               			FSSAI Lab Manual (2),2016 AEC/C/SAP/INS/4-37 Issue no.04, Issue date:01.04.2018 FSSAI Lab Manual, Metals (5), 2016	1.0 to 100 mg/kg or mg/l 0.1 to 10 mg/100g or 100 ml
           		Phosphorous	AOAC Method no.986.24, Ch-50, Page no.13 AOAC Method no.984.27 & 2011.14, Ch-50 AEC/C/SAP/INS/3-4	0.1 to 20 g/100g or 100 ml 0.1 to 10000 mg/kg or
         			Issue no.04, Issue date:01.04.2018 FSSAI Lab Manual (5), Metals	mg/l 
2.	Naturally occurring toxic substances			
a.	Food and Agricultural Products	Saffrole	AOAC Method no.969.13, Ch-29 AEC/C/SAP/INS/5-19, Issue no.04, Issue date:01.04.2018	8 to 1000 mg/kg or mg/l

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====	<del>                                     </del>	Hypericine	AEC/C/SAP/INS/1A-10 I Issue no.04, Issue date:01.04.2018	0.8 to 1000 mg/kg or mg/l
	     	Agaric acid	AEC/C/SAP/INS/6-3 Issue no.04, Issue date:01.04.2018	50 to 1000mg/kg or mg/l
		Hydrocyanic acid	FSSAI Lab Manual (32.3), AOAC Method no.915.03, Ch-49 AEC/C/SAP/F-136, Issue No. 04, Issue Date: 01.04.2018	Qualitative 0.01 to 10 mg/kg
3.	Mycotoxins			
а.	Food & Agriculture Products (Nut & Nut Products including	Aflatoxin B1	AOAC Method No. 991.31,Ch-49 AEC/C/SAP/INS/1-2 Issue no.: 04, Issue date: 01.04.2018 FSSAI Lab Manual (7)	10 to 100 μg/kg
	Peanuts,Edible Oil, Ghee, Alcoholic Drinks & Beverages (Wine), Cereal and Cereal	Aflatoxin B2	AOAC Method No. 991.31,Ch-49 AEC/C/SAP/INS/1-2 Issue no.: 04, Issue date: 01.04.2018 FSSAI Lab Manual (7)	5 to 100 μg/kg
	Products,Pulses and Pulse Products,Bakery Products, Spices Condiments and related products)	Aflatoxin G1	AOAC Method No. 991.31,Ch-49 AEC/C/SAP/INS/1-2 Issue no.: 04, Issue date: 01.04.2018 FSSAI Lab Manual (7)	10 to 100 μg/kg
	 	Aflatoxin G2	AOAC Method No. 991.31,Ch-49 AEC/C/SAP/INS/1-2	5 to 100 μg/kg

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             			Issue no.: 04, Issue date: 01.04.2018 FSSAI Lab Manual (7)	
<b>b.</b>	Cereal and Cereal Products Alcoholic Beverages	Ochratoxin A	AEC/C/SAP/INS/1-11, Issue no.:04, Issue date: 01.04.2018	0.01 to 50 mg/kg
C.	Apple Juice	Patulin	AEC/C/SAP/INS/1-11, Issue no.:04, Issue date: 01.04.2018	0.01 to 100 mg/kg
4.	Food and Agri Products	PAH		
       	Fish & Fish Products	Benzo(a)pyrene	AEC/C/SAP/INS/5-20, Issue no.:04, Issue date: 01.04.2018	0.1 to 10 mg/kg
5.	Polychlorinated Biphenyles		 	   
	Fish & Fish Products	Polychlorinated biphenyles (Sum of PCB28, PCB52, PCB101, PCB138, PCB153, PCB180)	AEC/C/SAP/INS/6-8, Issue No. 04, Issue Date:01.04.2018	0.01 to 10 mg/kg
6.	Pesticides residues in Food & Agriculture Products			
       	Fresh Fruits and Vegetables & Products	4-bromo-2-chlorophenol (metabolite of Profenophos)	AEC/C/SAP/INS/6-1, Issue No.04,Issue date: 01.04.2018	0.01 to 10 mg/kg
   	   	2-Bromo-2-nitropropane- 1,3-diol	AOAC Method no. 2007.01,Ch-10	0.01 to 10 mg/kg

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		Alachlor		0.01 to 10 mg/kg
		Aldrin (Aldrin and dieldrin combined expressed as dieldrin)		0.01 to 10 mg/kg
	<u> </u>	Aldrin		0.01 to 10 mg/kg
		Dieldrin	<del> </del>	0.01 to 10 mg/kg
		Allethrin and Bioallethrin	<del> </del>	0.01 to 10 mg/kg
		Bendiocarb	<del> </del>	0.01 to 10 mg/kg
	<del> </del>	Bifenthrin		0.01 to 10 mg/kg
	<del> </del>	Butachlor		0.01 to 10 mg/kg
	<del> </del>	Captafol	AEC/C/SAP/INS/6-1, Issue	0.01 to 10 mg/kg
		Captan	No.04,Issue date:	0.01 to 10 mg/kg
		Chlordane (cis & trans)	01.04.2018	0.01 to 10 mg/kg
		cis-Chlordane		0.01 to 10 mg/kg
		trans-Chlordane	AOAC Method no.	0.01 to 10 mg/kg
		Chlorfenapyr	2007.01,Ch-10	0.01 to 10 mg/kg
		Chlorfenvinphos (Chlorienvinphos)	 	0.01 to 10 mg/kg
		Chlorothalonil		0.01 to 10 mg/kg
		Chlorpyrifos		0.01 to 10 mg/kg
		Chlorpyrifos methyl		0.01 to 10 mg/kg
	 	Chlorobenzilate	 	0.01 to 10 mg/kg
		Cyfluthrin (including other mixtures of constituent isomers sum of isomers)		0.01 to 10 mg/kg
	<del> </del>	Cyfluthrin 1	<del> </del>	0.01 to 10 mg/kg
	<del> </del>	Cyfluthrin 2	<del> </del>	0.01 to 10 mg/kg
	<del> </del>	Cyfluthrin 3	<del> </del>	0.01 to 10 mg/kg
		Cyfluthrin 4	<del> </del>	0.01 to 10 mg/kg
	<del> </del>   	Cypermethrin (including other mixtures of	AEC/C/SAP/INS/6-1 Issue No.04, Issue date:	0.01 to 10 mg/kg

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F	T	constituent isomers	01.04.2018	
		sum of isomers)		
		Cypermethrin 1	AOAC, 20 <sup>th</sup> Ed.,2016,	0.01 to 10 mg/kg
		Cypermethrin 2	Method no. 2007.01,Ch-10	0.01 to 10 mg/kg
   		Cypermethrin 3		0.01 to 10 mg/kg
<u></u> -	<del> </del>	Cypermethrin 4	<u> </u>	0.01 to 10 mg/kg
		DDT (all isomers, sum of		0.01 to 10 mg/kg
į		p,p´-DDT, o,p´-DDT, p,p´-		
 		DDE and p,p´-TDE (DDD)	 	 
L	<u> </u>	expressed as DDT)		ļ 
 	 <b> </b>	p,p'-DDT	 <del> </del>	0.01 to 10 mg/kg
 	 <b> </b>	o,p'-DDT	 <del> </del>	0.01 to 10 mg/kg
 	 <b> </b>	p,p'-DDE	 <del> </del>	0.01 to 10 mg/kg
 	 <del> </del>	o,p'-DDE	 	0.01 to 10 mg/kg
 	 <b> </b>	o,p- DDD	 	0.01 to 10 mg/kg
 	 <del> </del>	p,p'- TDE(DDD)	 	0.01 to 10 mg/kg
   	 	Deltamethrin	 	0.01 to 10 mg/kg
├ 	<del> </del>	Dichlorvos	 L	0.01 to 10 mg/kg
   	 	Dicofol (sum of p, p and o,p isomers)	 	0.01 to 10 mg/kg
	T	Dieldrin	AEC/C/SAP/INS/6-1, Issue	0.01 to 10 mg/kg
	T	3,4- dichloroaniline	No.04,Issue date:	0.01 to 10 mg/kg
	T	Endosulphan (All isomers,	01.04.2018	0.01 to 10 mg/kg
į	į	sum of <i>alpha</i> - and <i>beta</i> -	AOAC, 20 <sup>th</sup> Ed.,2016,	İ
		isomers and endosulphan	Method no. 2007.01,Ch-10	 
 	Í 	sulphate expressed as endosulphan)		 
<u> </u>	<del> </del>	Alpha-Endosulphan		0.01 to 10 mg/kg
<u> </u>	<del> </del>	Beta-Endosulphan		0.01 to 10 mg/kg
ļ	<del> </del>	Endosulphansulphate		0.01 to 10 mg/kg
Γ	<del> </del>	Endrin		0.01 to 10 mg/kg

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	T	Ethion		0.01 to 10 mg/kg
ļ	<del> </del>	Ethofenprox (Etofenprox)		0.01 to 10 mg/kg
 	<del> </del>	Fenitrothion		0.01 to 10 mg/kg
	T	Fenpropathrin		0.01 to 10 mg/kg
		Fenvalerate (any ratio of constituent isomers (RR,SS,RS & SR) including fenvalerate) (F) (R)		0.01 to 10 mg/kg
       	 	Fenvalerate&Esfenvalerat e (sum of RR & SS, RS & SR isomers)		0.01 to 10 mg/kg
ļ	T	Formothion	AEC/C/SAP/INS/6-1, Issue	0.01 to 10 mg/kg
     	     	HCH (sum of isomers, except the <i>gamma</i> isomer)	No.04,Issue date: 01.04.2018 AOAC, 20 <sup>th</sup> Ed.,2016,	0.01 to 10 mg/kg
<u> </u>	<del> </del>	Alpha-HCH	Method no. 2007.01,Ch-10	0.01 to 10 mg/kg
<u> </u>	<del> </del>	Beta-HCH	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0.01 to 10 mg/kg
<u> </u>	<del> </del>	Delta-HCH		0.01 to 10 mg/kg
         		Heptachlor (sum of heptachlor and heptachlor epoxide expressed as heptachlor)		0.01 to 10 mg/kg
ļ	<del> </del>	Heptachlor	<u> </u>	0.01 to 10 mg/kg
	<del> </del>	Heptachlor epoxide		0.01 to 10 mg/kg
	<del> </del>	Lambda-cyhalothrin		0.01 to 10 mg/kg
	<del> </del>	Lindane (gamma-HCH)		0.01 to 10 mg/kg
	<del> </del>	Oxyfluorfen		0.01 to 10 mg/kg
		Parathion methyl (sum of Parathion methyl and paraoxon methyl expressed as Parathion methyl)		0.01 to 10 mg/kg

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	<del>_</del>	Parathion methyl		0.01 to 10 mg/kg
	<del> </del>	Paraoxon methyl		0.01 to 10 mg/kg
	<del> </del>	Parathion ethyl		0.01 to 10 mg/kg
	†     	Permethrin (sum of isomers)		0.01 to 10 mg/kg
	<del> </del>	Cis-Permethrin		0.01 to 10 mg/kg
	<del> </del>	trans-Permethrin	AEC/C/SAP/INS/6-1,	0.01 to 10 mg/kg
	<u> </u>	<u>i</u>	Issue No.04,Issue date:	
		Phorate (sum of phorate, its oxygen analogue and	01.04.2018	0.01 to 10 mg/kg
		their sulfones expressed	AOAC, 20 <sup>th</sup> Ed.,2016,	 
	į	as phorate)	Method no. 2007.01,Ch-10	
		Phorate -sulfone		0.01 to 10 mg/kg
		Phorate -sulfoxide		0.01 to 10 mg/kg
		Propanil		0.01 to 10 mg/kg
	T	Propetamphos		0.01 to 10 mg/kg
	T	Pyriproxyfen		0.01 to 0.05 mg/kg
	T	tau Fluvalinate		0.01 to 10 mg/kg
	Ţ	Transfluthrin		0.01 to 10 mg/kg
	<del> </del>	Trifluralin		0.01 to 10 mg/kg
	<del> </del>	Dithiocarbamates	AEC/C/SAP/INS/6-4,	0.01 to 10 mg/kg
		(Mancozeb, Maneb,	Issue No.04,Issue date:	
		Propineb, Metiram,	01.04.2018	 
		Thiram, Zineb and Ziram		
		collectively estimated as	AOAC, 20 <sup>th</sup> Ed.,2016,	 
	į	CS2)	Method no. 2007.01,Ch-10	
	<del> </del>	Abamectin (sum of	AEC/C/SAP/INS/6-1,	0.005 to 10 mg/kg
		avermectin B1a,	Issue No.04,Issue date:	
		avermectinB1b and	01.04.2018	 
	į	delta-8,9 isomer of	İ	
		avermectin B1a)	AOAC, 20 <sup>th</sup> Ed.,2016,	 
		Acephate	Method no. 2007.01,Ch-10	0.01 to 10 mg/kg

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		Acetamiprid		0.01 to 10 mg/kg
	<del> </del>	Ametoctradin		0.01 to 10 mg/kg
	<del> </del>	Atrazine		0.01 to 10 mg/kg
		Azoxystrobin		0.01 to 10 mg/kg
		Benalaxyl including other mixtures of constituent isomers including Benalaxyl-M		0.01 to 10 mg/kg
	<del> </del>	(sum of isomers) Benfuracarb	<del> </del>	0.01 to 10 mg/kg
	<del> </del>	Bifenazate		0.01 to 10 mg/kg 0.01 to 10 mg/kg
	<del></del>	<del></del>		
	<del></del>	Bitertanol		0.01 to 10 mg/kg
	<del> </del>	Buprofezin	<u> </u>	0.01 to 10 mg/kg
	<del> </del>	Carbaryl	<u> </u>	0.01 to 10 mg/kg
	 	Carbendazim (including Benomyl)		0.01 to 10 mg/kg
	T	Carbendazim		0.01 to 10 mg/kg
	<del> </del>	Benomyl		0.01 to 10 mg/kg
		Carbofuran (sum of Carbofuran and 3-hydroxy-carbofuran expressed as Carbofuran)		0.002 to 10 mg/kg
	<del> </del>	Carbofuran	AEC/C/SAP/INS/1-1,	0.002 to 10 mg/kg
	<del> </del>	3-hydroxy-carbofuran	Issue No.04, Issue date:	0.002 to 10 mg/kg
	<u> </u>	Carbosulfan	01.04.2018	0.01 to 10 mg/kg
	<del> </del>	Carboxin		0.01 to 10 mg/kg
	<del> </del>	Cartap hydrochloride	AOAC, 20 <sup>th</sup> Ed.,2016,	0.01 to 10 mg/kg
	<del> </del>	Chlorantraniliprole	Method no. 2007.01,Ch-10	0.01 to 10 mg/kg
	<del> </del>	Clothianidin		0.01 to 10 mg/kg
	<del> </del>	Cyantraniliprole		0.01 to 10 mg/kg
	<del> </del>	Cyazofamid		0.01 to 10 mg/kg
		Cymoxanil		0.01 to 10 mg/kg
	<del> </del> 	Dazomet (Methyl	<del> </del>	0.01 to 10 mg/kg

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	T	isothiocyanate resulting		[ <u>-</u>
	 	from the use of Dazomet	 	
1	 	and metam)		
	T	Diafenthiuron	 	0.01 to 10 mg/kg
	 	Diazinon		0.01 to 10 mg/kg
<u></u> -	<del> </del>	Difenoconazole		0.01 to 10 mg/kg
		Diflubenzuron	AEC/C/SAP/INS/1-1,	0.01 to 10 mg/kg
   	 	Dimethoate (Including Omethoate)	Issue No.04, Issue date: 01.04.2018	0.01 to 10 mg/kg
	<u> </u>	Dimethoate		0.01 to 10 mg/kg
	<u> </u>	Omethoate	AOAC, 20 <sup>th</sup> Ed.,2016,	0.01 to 10 mg/kg
	<u> </u>	Dimethomorph	Method no. 2007.01,Ch-10	0.01 to 10 mg/kg
		Dinocap (sum of dinocap isomers and their corresponding phenols expressed as dinocap) and Meptyldinocap	AEC/C/SAP/INS/1-9, Issue No.04, Issue date: 01.04.2018	0.01 to 10 mg/kg
L	 	Dinotefuran	AEC/C/SAP/INS/1-1,	0.01 to 10 mg/kg
ļ ———	 <del> </del>	Dithianon	Issue No.04, Issue date:	0.01 to 10 mg/kg
		Diuron (Diuron including all components containing 3,4- dichloroaniline moiety expressed as 3,4- dichloroaniline)	01.04.2018	0.01 to 10 mg/kg
ļ	<del> </del>	Diuron		0.01 to 10 mg/kg
ļ	<del> </del>	Dodine		0.01 to 10 mg/kg
ļ	<del> </del>	Edifenphos		0.01 to 10 mg/kg
	T	Emamectin Benzoate		0.01 to 10 mg/kg
	T	Etoxazole		0.01 to 10 mg/kg
	T	Etrimfos		0.01 to 10 mg/kg
		Famoxadone		0.01 to 10 mg/kg

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	T	Fenamidone	AEC/C/SAP/INS/1-1,	0.01 to 10 mg/kg
	<del> </del>	Fenarimol	Issue No.04, Issue date:	0.01 to 10 mg/kg
	<del> </del>	Fenazaquin	01.04.2018	0.01 to 10 mg/kg
	<del> </del>	Fenobucarb	AOAC, 20 <sup>th</sup> Ed.,2016,	0.01 to 10 mg/kg
	 	Fenpyroximate	Method no. 2007.01,Ch-10	0.01 to 10 mg/kg
		Fenthion (fenthion and its oxygen analogue, their sulfoxides and sulfone expressed as parent)		0.01 to 10 mg/kg
	<del> </del>	Fenthion		0.01 to 10 mg/kg
	<del> </del>	Fenthion-sulfone		0.01 to 10 mg/kg
	<del> </del>	Fenthion-sulphoxide	<del> </del>	0.01 to 10 mg/kg
		Fipronil (sum of fipronil + sulfone metabolite (MB46136) expressed as fipronil)		0.005 to 10 mg/kg
	<u>†</u>	Fipronil	<del> </del>	0.005 to 10 mg/kg
	<del> </del>	Fipronil sulfone		0.005 to 10 mg/kg
	     	Flonicamid (sum of flonicamid, TNFG and TNFA) (R)		0.01 to 10 mg/kg
	<del> </del>	Flonicamid		0.01 to 10 mg/kg
	<del> </del>	TNFG		0.01 to 10 mg/kg
	<del> </del>	TNFA		0.01 to 10 mg/kg
	† !	Flubendiamide		0.01 to 10 mg/kg
		Flufenacet (sum of all compounds containing the N fluorophenyl-N-isopropyl moiety	AEC/C/SAP/INS/1-1, Issue No.04, Issue date: 01.04.2018	0.01 to 10 mg/kg
		expressed as flufenacet equivalent)	AOAC, 20 <sup>th</sup> Ed.,2016, Method no. 2007.01,Ch-10	 

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ļ	<del> </del>	Flufenoxuron	1	0.01 to 10 mg/kg
·	<del> </del>	Flufenzine	1	0.01 to 10 mg/kg
ļ	<del> </del>	Fluopicolide		0.01 to 10 mg/kg
	<del> </del>	Flusilazole		1.01 to 10 mg/kg
 	 	Hexaconazole		0.01 to 10 mg/kg
 	<del> </del>	Hexythiazox	 	0.01 to 10 mg/kg
	ļ ——————————	Imidacloprid	 	0.01 to 10 mg/kg
	 	Indoxacarb (sum of R and S isomers)	 	0.01 to 10 mg/kg
		lodosulfuron-methyl (iodosulfuron-methyl including salts, expressed as iodosulfuron-methyl)		0.01 to 10 mg/kg
ļ·		Iprobenphos		0.01 to 10 mg/kg
	<del> </del>	Iprodione		0.05 to 100 mg/kg
		Iprovalicarb		0.01 to 10 mg/kg
		Isoprothiolane		0.01 to 10 mg/kg
		Isoproturon	AEC/C/SAP/INS/1-1,	0.01 to 10 mg/kg
		Kresoxim methyl	Issue No.04, Issue date:	0.01 to 10 mg/kg
	<u> </u>	Linuron	01.04.2018	0.01 to 10 mg/kg
	<u> </u>	Lufenuron	 	0.01 to 10 mg/kg
	 	Malathion (sum of   malathion and malaoxon   expressed as malathion)	AOAC, 20 <sup>th</sup> Ed.,2016, Method no. 2007.01,Ch-10	0.01 to 10 mg/kg
<u> </u>	<del>†</del>	Malathion	<del> </del>	0.01 to 10 mg/kg
<u> </u>	<del> </del>	Malaoxon		0.01 to 10 mg/kg
<u> </u>	<del> </del>	Mandipropamid	<del> </del>	0.01 to 10 mg/kg
<u> </u>	<del> </del>	Metalaxyl&Metalaxyl-M	<u> </u>	0.01 to 10 mg/kg
	<del> </del>	Methamidophos		0.01 to 10 mg/kg
 	† !	Methomyl and Thiodicarb (sum of methomyl and	 	0.01 to 10 mg/kg
	<u>!</u>	(Sum of memorily) and	<u>!</u>	<u> </u>

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	T	thiodicarb expressed as	 	 
	 <del> </del>	methomyl)	 	0.04 + 40 - 7/1-
	<del>-</del>	Methomyl	<u> </u>	0.01 to 10 mg/kg
	 	Thiodicarb		0.01 to 10 mg/kg
		Metholachlor and S- Metholachlor (metolachlor including other mixtures of constituents isomer including S Metolachlor (sum of isomers))		0.01 to 10 mg/kg
	<del> </del>	Metribuzin	AEC/C/SAP/INS/1-1,	0.01 to 10 mg/kg
	<del> </del>	Milbemectin (sum of	Issue No.04, Issue date:	0.02 to 10 mg/kg
		milbemycin A4 and	01.04.2018	
	] I	milbemycin A3, expressed	] I	
		as milbemectin)	AOAC, 20 <sup>th</sup> Ed.,2016, Method no. 2007.01,Ch-10	
		Milbemycin A3		0.02 to 10 mg/kg
		Milbemycin A4		0.02 to 10 mg/kg
		Monocrotophos		0.01 to 10 mg/kg
	<del> </del>	Myclobutanil		0.01 to 10 mg/kg
	<del> </del>	Nereistoxin		0.01 to 10 mg/kg
	<u> </u>	Novaluron		0.01 to 10 mg/kg
	<del> </del>	Oxamyl		0.01 to 10 mg/kg
	<del> </del>	Oxadiazon		0.01 to 10 mg/kg
	<del> </del>	Oxycarboxin		0.01 to 10 mg/kg
	<del> </del>	Oxydemeton- methyl (sum		0.01 to 10 mg/kg
		of oxydemeton methyl and		
		demeton-S-methylsulfone		
	į	expressed as oxydemeton		
		methyl)	 	

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		Oxydemeton methyl		0.01 to 10 mg/kg
	<del> </del>	Demeton-S-methylsulfone	<u> </u>	0.01 to 10 mg/kg
	<del> </del>	Paclobutrazol		0.01 to 10 mg/kg
		Penconazole	<u> </u>	0.01 to 10 mg/kg
	<del> </del>	Pencycuron		0.01 to 10 mg/kg
	<del> </del>	Pendimethalin		0.01 to 10 mg/kg
	<del> </del>	Phenthoate	AEC/C/SAP/INS/1-1,	0.01 to 10 mg/kg
	<del> </del>	Phorate	Issue No.04, Issue date:	0.01 to 10 mg/kg
	<del> </del>	Phosalone	01.04.2018	0.01 to 10 mg/kg
	<del> </del>	Phosphamidon	1	0.01 to 10 mg/kg
	<del> </del>	Pirimiphos-methyl	AOAC, 20 <sup>th</sup> Ed.,2016, Method no. 2007.01,Ch-10	0.01 to 10 mg/kg
	<del> </del>	Profenophos		0.01 to 10 mg/kg
	 	Propamocarb (sum of propamocarb and its salt expressed as propamocarb)		0.01 to 10 mg/kg
	<del> </del>	Propargite	<u> </u>	0.01 to 10 mg/kg
		Propiconazole	<u> </u>	0.01 to 10 mg/kg
		Propoxur	<u> </u>	0.01 to 10 mg/kg
	<del> </del>	Pyraclostrobin	<u> </u>	0.01 to 10 mg/kg
	<del> </del>	Pyridaben	<u></u>	0.01 to 10 mg/kg
	<u> </u>	Quinalphos	ļ	0.01 to 10 mg/kg
	<del> </del>	Simazine	<u> </u>	0.01 to 10 mg/kg
	   	Spinosad (sum of Spinosyn A+D)		0.01 to 10 mg/kg
	<u> </u>	Spinosyn A		0.01 to 10 mg/kg
	<del> </del>	Spinosyn D	AEC/C/SAP/INS/1-1,	0.01 to 10 mg/kg
	<del> </del>	Spirodiclofen	Issue No.04, Issue date:	0.01 to 10 mg/kg
	<del> </del>	Spiromesifen	01.04.2018	0.01 to 10 mg/kg
	<del> </del>	Tebuconazole	1	0.01 to 10 mg/kg
	<u> </u>	Temephos	AOAC, 20 <sup>th</sup> Ed.,2016,	0.01 to 10 mg/kg
	<del> </del>	Tetraconazole	Method no. 2007.01,Ch-10	0.01 to 10 mg/kg

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	T	Thiacloprid		0.01 to 10 mg/kg
	<del> </del>	Thiamethoxam (sum of		0.01 to 10 mg/kg
	ļ	thiamethoxam and		
		clothianidin expressed as	 	
	l !	thiamethoxam)		
	<del> </del>	Thiobencarb	<u> </u>	0.01 to 10 mg/kg
		Thiodicarb	<u></u>	0.01 to 10 mg/kg
	 	Thiometon	 	0.01 to 10 mg/kg
	 	Thiocyclam	 	0.01 to 10 mg/kg
		Triadimefon (sum of	 	0.01 to 10 mg/kg
	į	triadimefon and		
	<u> </u>	triadimenol)	 	 
	 <del> </del>	Triadimefon	 <del> </del>	0.01 to 10 mg/kg
		Thiophanate-methyl	AEC/C/SAP/INS/1-1,	0.01 to 10 mg/kg
		 	Issue No.04, Issue date: 01.04.2018	
	ļ		01.04.2016	
			AOAC, Method no.	
			2007.01,Ch-10	
	<del> </del>	Triadimenol	AEC/C/SAP/INS/1-1,	0.01 to 10 mg/kg
	<del> </del>	Triazophos	Issue No.04, Issue date:	0.01 to 10 mg/kg
	<del> </del>	Trichlorfon	01.04.2018	0.01 to 10 mg/kg
	<del> </del>	Tricyclazole		0.01 to 10 mg/kg
	<del> </del>	Tridemorph	AOAC,Method no.	0.01 to 10 mg/kg
	<del> </del>	Trifloxystrobin	2007.01,Ch-10	0.01 to 10 mg/kg
	<del> </del>	Diclofluanid	<del> </del>	0.1 to 10 mg/kg
	<del> </del>	Azinphos methyl		0.1 to 10 mg/kg
	<del> </del>	Mevinphos	<del> </del>	0.1 to 10 mg/kg
	<del> </del>	Imazail		0.1 to 10 mg/kg
	<del> </del>	1-Naphthylacetic acid	AEC/C/SAP/INS/1-3,	0.02 to 10 mg/kg
		(alphanapthyl acetic acid)	Issue No.04, Issue date:	
	 	2,4-D (sum of 2,4-D and	01.04.2018	0.01 to 10 mg/kg
	<del></del>	L	1	L

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	     	its esters expressed as 2,4-D)	   AOAC, Method no.   2007.01,Ch-10	
	†	4- CPA (4 Chlorophenoxy acetic acid)		0.01 to 10 mg/kg
<u> </u>	<del> </del>	6-Benzyl adenine		0.01 to 10 mg/kg
<u> </u>	<del> </del>	Azadirachtin	<del> </del>	0.01 to 10 mg/kg
   	<del>                                     </del>	Chlormequat Chloride (CCC)		0.01 to 10 mg/kg
	<del> </del>	Diquat		0.01 to 10 mg/kg
	T	Ethephon	 	0.01 to 10 mg/kg
	T	Forchlorfenuron (CPPU)	 	0.01 to 10 mg/kg
		Fosetyl-Al (sum fosetyl + phosphorous acid and their salts, expressed as fosetyl)		0.01 to 10 mg/kg
	<del> </del>	Gibberellic acid	<del> </del>	0.01 to 10 mg/kg
<u> </u>	<del> </del>	Homobrassinolide	<del> </del>	0.01 to 10 mg/kg
<u> </u>	+	Mepiquat Chloride	<del> </del>	0.01 to 10 mg/kg
 	<del> </del>   	Paraquat	AEC/C/SAP/INS/1-3, Issue No.04, Issue date:	0.01 to 10 mg/kg
 	<del> </del>	Uracil	01.04.2018	0.01 to 10 mg/kg
i   	İ 	 	AOAC, Method no. 2007.01,Ch-10	
<u></u>	<del> </del>	Glufosinate- ammonium	AEC/C/SAP/INS/1-5,	0.01 to 10 mg/kg
	   	MPP	Issue No.04, Issue date: 01.04.2018	0.01 to 10 mg/kg
	       	NAG	   AOAC,Method no.   2007.01,Ch-10	0.01 to 10 mg/kg
	   	Glyphosate	AEC/C/SAP/INS/1-5, Issue No.04, Issue date:	0.01 to 10 mg/kg

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	<u> </u>		01.04.2018	
	<del> </del>	Sulphur	AEC/C/SAP/INS/1A-	0.5 to 100 mg/kg
	l I		12,Issue No.04, Issue date:	
	] ]	 	01.04.2018	 
	ļ	į	AOAC, Method no.	
<u></u>	 	L	2007.01,Ch-10	! L
	] 	Hydrogen Cyanamide	AEC/C/SAP/INS/1A-13	0.01 to 100 mg/kg
	į	(Cyanamide including	Issue No.04,Issue date:	
	] 	salts expressed as	01.04.2018	 
	] 	cyanamide)		 
	į	į	AOAC, Method no.	
	 <del> </del>		2007.01,Ch-10	 
	<del> </del>	1-Naphtyl acetamide	AEC/C/SAP/INS/1-1, Issue	0.01 to 100 mg/kg
	<del> </del>	Boscalid	No.04, Issue date:	0.01 to 100 mg/kg
	<del> </del>	Chlorfluazuron	01.04.2018	0.01 to 100 mg/kg
	<del> </del>	Chlorpropham	AOAC, Method no. 2007.01,Ch-10	0.01 to 100 mg/kg
	<del> </del>	Cyflumetofen	- 2007.01,CII-10	0.01 to 100 mg/kg
	<u> </u>	Epoxiconazole	 	0.01 to 100 mg/kg
	! <b></b>	Ethiprole	 	0.01 to 100 mg/kg
	! <b></b>	Fenhexamid (F)	 	0.01 to 100 mg/kg
	 <del> </del>	Fluazifop-p	 	0.01 to 100 mg/kg
	 <del> </del>	Fluazifop-p-Butyl	 	0.01 to 100 mg/kg
	 <del> </del>	Fluopyram	 	0.01 to 100 mg/kg
	 <del> </del>	Fluxapyroxad	 	0.01 to 100 mg/kg
	 	MeptylDinocap	AEC/C/SAP/INS/1-9,	0.01 to 100 mg/kg
	į		Issue No.04, Issue date:	İ
			01.04.2018	
	 		AOAC, Method no.	 
	<u> </u>	<del></del>	2007.01,Ch-10	L
	<u> </u>	Metrafenone	AEC/C/SAP/INS/1-1,	0.01 to 100 mg/kg
	! <del> </del>	Nitenpyram	Issue No.04, Issue date:	0.01 to 100 mg/kg
	! <del> </del>	Picoxystrobin	01.04.2018	0.01 to 100 mg/kg
L	ı ⊥	Pymetrozine	 	0.01 to 100 mg/kg

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		Pyraclostrobin	AOAC, Method no.	0.01 to 100 mg/kg
	<del> </del>	Spinetoram	2007.01,Ch-10	0.01 to 100 mg/kg
	†	Spirotetramate		0.01 to 100 mg/kg
	<u> </u>	Spirotetramateenol		0.01 to 100 mg/kg
	<del> </del>	Spirotetramate		0.01 to 100 mg/kg
	İ	Ketohydroxy		
	T	Spirotetramate		0.01 to 100 mg/kg
	İ	monohydroxy		
	T	Spirotetramateenol-		0.01 to 100 mg/kg
	<u> </u>	glucoside	<u> </u>	<u> </u>
		Thiabendazole	AEC/C/SAP/INS/1-1,	0.01 to 100 mg/kg
		Tolfenpyrad	Issue No.04, Issue date:	0.01 to 100 mg/kg
	<u> </u>	Trifluralin	01.04.2018	0.01 to 100 mg/kg
	<u> </u>	Aldicarb		0.01 to 100 mg/kg
	   	Fluchloralin	AOAC, Method no. 2007.01, Ch-10	0.01 to 100 mg/kg
	<u> </u>	MCPA	AEC/C/SAP/INS/1-1,	0.01 to 100 mg/kg
	<u> </u>	Sulfosulfuron	Issue No.04, Issue date:	0.01 to 100 mg/kg
	<u> </u>	Ethoxysulfuron	01.04.2018	0.01 to 100 mg/kg
	<del> </del>	Chlorimuron-ethyl	1	0.01 to 100 mg/kg
	<del> </del>	Diclofop methyl	AOAC, Method no.	0.01 to 100 mg/kg
	<del> </del>	Pretilachlor	2007.01, Ch-10	0.01 to 100 mg/kg
	<del> </del>	Metsulfuron-methyl	1	0.01 to 100 mg/kg
	<del> </del>	Methabenzthiazuron		0.01 to 100 mg/kg
	<del> </del>	Cyhalofop-butyl		0.01 to 100 mg/kg
	<del> </del>	Anilofos		0.01 to 100 mg/kg
	<del> </del>	Fenoxaprop -P-ethyl	AEC/C/SAP/INS/1-1,	0.01 to 100 mg/kg
	<del> </del>	Clodinafop-propargyl ester	Issue No.04, Issue date:	0.01 to 100 mg/kg
		Quizalofop - ethyl	01.04.2018 AOAC, Method no. 2007.01,Ch-10	0.01 to 100 mg/kg
	<del> </del>	Carpropamid	i	0.01 to 100 mg/kg
	<del> </del>	Oxadiargyl		0.01 to 100 mg/kg

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	<u> </u>	Pyrazosulfuron-ethyl		0.01 to 100 mg/kg
2.	Cereals, Pulses &	Aldrin	AEC/C/SAP/INS/6-1,	0.01 to 10 mg/kg
	Products	Dieldrin	Issue No.04,Issue date: 01.04.2018	0.01 to 10 mg/kg
	<del> </del>	Chlordane	AOAC, Method no.	0.01 to 10 mg/kg
	<del> </del>	Dichlorvos	2007.01,Ch-10	0.01 to 10 mg/kg
	<del> </del>	Fenitrothion		0.01 to 10 mg/kg
	<del> </del>	Alfa (α) HCH		0.01 to 10 mg/kg
	<del> </del>	Beta (β) HCH	T	0.01 to 10 mg/kg
	<del> </del>   	Gamma (γ) HCH (known as Lindane)		0.01 to 10 mg/kg
	T	Delta (δ) HCH		0.01 to 10 mg/kg
<del>-</del>	<u> </u>	Heptachlor		0.01 to 10 mg/kg
	<u> </u>	Chlorienvinphos		0.01 to 10 mg/kg
	T	Chlorpyrifos		0.01 to 10 mg/kg
	T	Ethion		0.01 to 10 mg/kg
		Decamethrin / Deltamethrin		0.01 to 10 mg/kg
	T	Fenthion		0.01 to 10 mg/kg
+		Dithiocarbamates	AEC/C/SAP/INS/6-4, Issue No.04,Issue date: 01.04.2018	0.01 to 10 mg/kg
		 	AOAC, Method no. 2007.01,Ch-10	   
	 	Carbaryl	AEC/C/SAP/INS/1-1,	0.01 to 10 mg/kg
	 	Diazinon	Issue No.04, Issue date:	0.01 to 10 mg/kg
	 	Malathion	01.04.2018	0.01 to 10 mg/kg
		Phosphamidon residues		0.01 to 10 mg/kg
		Monocrotophos	AOAC, Method no. 2007.01,Ch-10	0.01 to 10 mg/kg
		Trichlorfon		0.01 to 10 mg/kg
		Thiometon		0.01 to 10 mg/kg
		Carbendazim		0.01 to 10 mg/kg

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	T	Benomyl		0.01 to 10 mg/kg
	<del> </del>	Carbofuran		0.01 to 10 mg/kg
	<del> </del>	Pirimiphos-methyl		0.01 to 10 mg/kg
		Oxydemeton methyl	 	0.01 to 10 mg/kg
	<del> </del>	Phenthoate	AEC/C/SAP/INS/1-1,	 
		Phorate	Issue No.04, Issue date: 01.04.2018	0.01 to 10 mg/kg
			AOAC, Method no. 2007.01,Ch-10	
	<del> </del>	2,4D	AEC/C/SAP/INS/1-3,	0.01 to 10 mg/kg
	 	Paraquat Dichloride	Issue No.04, Issue date: 01.04.2018 AOAC, Method no. 2007.01,Ch-10	0.01 to 10 mg/kg
3.	Edible Oils	Oxyfluorfen	AEC/C/SAP/INS/6-1, Issue No.04,Issue date: 01.04.2018	0.01 to 10 mg/kg
		 	AOAC, Method no. 2007.01,Ch-10	
	<del> </del>	Metiram	<del>-</del>	0.01 to 10 mg/kg
	<del>_</del>	Phenthoate	AEC/C/SAP/INS/1-1,	0.005 to 10 mg/kg
		Trichlorfon	Issue No.04, Issue date:	0.005 to 10 mg/kg
		Phorate	01.04.2018	0.005 to 10 mg/kg
	 	Metolachlor	1	0.005 to 10 mg/kg
	 	Metribuzin	AOAC, Method no.	0.005 to 10 mg/kg
		Pendimethalin	2007.01,Ch-10	0.005 to 10 mg/kg
		Imazethapyr		0.005 to 10 mg/kg
	<u> </u>	Clomazone		0.005 to 10 mg/kg
	<u> </u>	Triazophos	l L	0.005 to 10 mg/kg

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	T	Phosalone		0.005 to 10 mg/kg
4.	Milk & Milk	Aldrin	AEC/C/SAP/INS/6-1,	0.005 to 10 mg/kg
	Products	Dieldrine	Issue No.04,Issue date:	0.005 to 10 mg/kg
<u></u>	<del> </del>	Chlordane	01.04.2018	0.005 to 10 mg/kg
		(cis+trans chlordane)		
   		2,4 DDT	AOAC, Method no. 2007.01,Ch-10	0.005 to 10 mg/kg
	T	2,4 DDD		0.005 to 10 mg/kg
	T	4,4 DDD		0.005 to 10 mg/kg
		2,4 DDT		0.005 to 10 mg/kg
		2,4 DDE		0.005 to 10 mg/kg
		4,4 DDE		0.005 to 10 mg/kg
		4,4 DDT	AEC/C/SAP/INS/6-1,	0.005 to 10 mg/kg
L 	 	2,4 D	Issue No.04,Issue date:	0.005 to 10 mg/kg
L	 	Fenitrothion	01.04.2018	0.005 to 10 mg/kg
L	 	Heptachlor		0.005 to 10 mg/kg
 	 	Alfa (α) HCH	AOAC, Method no.	0.005 to 10 mg/kg
 	 <del> </del>	Beta (β) HCH	2007.01,Ch-10	0.005 to 10 mg/kg
   	 	│ Gamma (γ) HCH (known │ as Lindane)	 	0.005 to 10 mg/kg
	T	Delta (δ) HCH		0.005 to 10 mg/kg
   		Chlorfienvinphos (Alfa & Beta isomers)		0.005 to 10 mg/kg
F	T	Chlorpyriphos		0.005 to 10 mg/kg
<u> </u>		Ethion		0.005 to 10 mg/kg
<u> </u>	<del> </del>	Cypermethrin		0.005 to 10 mg/kg
	<del> </del>	Fenthion		0.005 to 10 mg/kg
	T	Fenvalerate		0.005 to 10 mg/kg
   	     	Paraquat Dichloride	AEC/C/SAP/INS/1-3, Issue No.04, Issue date:	0.005 to 10 mg/kg
     			01.04.2018 AOAC, Method no. 2007.01,Ch-10	

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	T	Monocrotophos	AEC/C/SAP/INS/1-1,	0.005 to 10 mg/kg
	<del> </del>	Trichlorfon	Issue No.04, Issue date:	0.005 to 10 mg/kg
	<del> </del>	Carbendazim	01.04.2018	0.005 to 10 mg/kg
	<del> </del>	Benomyl	AOAC, Method no.	0.005 to 10 mg/kg
	<del> </del>	Carbofuran	2007.01,Ch-10	0.005 to 10 mg/kg
	<del> </del>	Edifenphos	1	0.005 to 10 mg/kg
	<del> </del>	Phenthoate		0.005 to 10 mg/kg
	<del> </del>	Phorate		0.005 to 10 mg/kg
	<del> </del>	Pirimiphos-methyl		0.005 to 10 mg/kg
5.	Tea and Tea Products Coffee, Chicory, Cocoa and Products	Dicofol	AEC/C/SAP/INS/6-1, Issue No.04,Issue date: 01.04.2018 AOAC, Method no. 2007.01,Ch-10	0.01 to 10 mg/kg
		Quinolphos	AEC/C/SAP/INS/1-1, Issue No.04, Issue date: 01.04.2018 AOAC, Method no. 2007.01,Ch-10	0.005 to 10 mg/kg
		Fenazaquin	AEC/C/SAP/INS/1-5, Issue No.04, Issue date: 01.04.2018 AOAC, Method no. 2007.01,Ch-10	0.005 to 10 mg/kg
		Glyphosphate	AEC/C/SAP/INS/1-5,	0.01 to 10 mg/kg
	<u> </u>	Propargite	Issue No.04, Issue date:	0.01 to 10 mg/kg
	     	Glufosinate-ammonium	01.04.2018 AOAC, Method no. 2007.01,Ch-10	0.01 to 10 mg/kg
6.	Nuts & Products	Chlorienvinphos Chlorobenzilate	AEC/C/SAP/INS/6-1, Issue No.04,Issue date: 01.04.2018 AOAC, Method no. 2007.01,Ch-10	0.005 to 10 mg/kg 0.005 to 10 mg/kg

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	<del> </del>	Carbendazim	AEC/C/SAP/INS/1-1,	0.005 to 10 mg/kg
		Benomyl	Issue No.04, Issue date: 01.04.2018 AOAC, Method no. 2007.01,Ch-10	0.005 to 10 mg/kg
7.	Dry Fruits	Chlorobenzilate	AEC/C/SAP/INS/6-1,	0.005 to 10 mg/kg
- <u></u>	+	Ethion	Issue No.04,Issue date:	0.005 to 10 mg/kg
	 		01.04.2018	0.000 to 10 mg/kg 
	 	 	AOAC, Method no.	
	ļ		2007.01,Ch-10	
	<del> </del>	Malathion	AEC/C/SAP/INS/1-1,	0.005 to 10 mg/kg
	<del> </del>	Carbendazim	Issue No.04, Issue date:	0.005 to 10 mg/kg
	 	Benomyl	01.04.2018	0.005 to 10 mg/kg
	 		AOAC, Method no. 2007.01,Ch-10	
8.	Meat and Poultry	Aldrin, dieldrin	AEC/C/SAP/INS/6-1,	0.01 to 50 mg/kg
		D.D.T.	Issue No.04,Issue date:	0.01 to 50 mg/kg
	 	Fenitrothion	01.04.2018	0.01 to 50 mg/kg
	 	Gamma (γ) Isomer (Known as Lindane)	AOAC, Method no.	0.01 to 50 mg/kg
	<del> </del>	Chlorienvinphos		0.01 to 50 mg/kg
	<del> </del>	Chlorpyrifos		0.01 to 50 mg/kg
	<del> </del>	Ethion		0.01 to 50 mg/kg
	<del> </del>	Cypermethrin		0.01 to 50 mg/kg
	<del> </del>	Fenthion		0.01 to 50 mg/kg
	T	Fenvalerate		0.01 to 50 mg/kg
	T	2,4D	AEC/C/SAP/INS/1-3,	0.01 to 50 mg/kg
		Monocrotophos	Issue No.04, Issue date:	0.01 to 50 mg/kg
		Trichlorfon	01.04.2018	0.01 to 50 mg/kg

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		Carbendazim		0.01 to 50 mg/kg
	   	Benomyl	AOAC, Method no. 2007.01,Ch-10	0.01 to 50 mg/kg
	<del> </del>	Carbofuran		0.01 to 50 mg/kg
	 	Edifenphos		0.01 to 50 mg/kg
	<del> </del>	Phenthoate	AEC/C/SAP/INS/1-1,	0.01 to 50 mg/kg
	 	Phorate	Issue No.04, Issue date:	0.01 to 50 mg/kg
		Pirimiphos-methyl	01.04.2018	0.01 to 50 mg/kg
	   	 	AOAC, Method no. 2007.01,Ch-10	 
9.	Fish	Carbaryl	AEC/C/SAP/INS/1-1,	0.01 to 50 mg/kg
	<del> </del>	D.D.T	Issue No.04, Issue date:	0.01 to 50 mg/kg
	T	Endosulfan	01.04.2018	0.01 to 50 mg/kg
	T	Hexachlorocycle hexane	1	0.01 to 50 mg/kg
		and its Isomers	AOAC, Method no.	
	<u> </u>	(a) Alfa (α) Isomer	2007.01,Ch-10	 
		(b) Beta (β) Isomer		0.01 to 50 mg/kg
		(c) Gamma (γ) Isomer (known as Lindane)		0.01 to 50 mg/kg
	T	(d) Delta (δ) Isomer		0.01 to 50 mg/kg
	T	Quinolphos	AEC/C/SAP/INS/1-1,	0.01 to 50 mg/kg
		ļ	Issue No.04, Issue date:	
			01.04.2018	
	i !		AOAC, Method no. 2007.01,Ch-10	
10.	Spices,	Alpha-Endosulphan	AEC/C/SAP/INS/6-1,Issue	0.01 to 10 mg/kg
	Condiments and	Beta-Endosulphan	No.04,Issue date:	0.01 to 10 mg/kg
	their Products	Endosulphansulphate	01.04.2018	0.01 to 10 mg/kg
		Dicofol	AOAC, Method no.	0.01 to 10 mg/kg
		Iprodione	2007.01,Ch-10	0.01 to 10 mg/kg
		Cypermethrin		0.01 to 10 mg/kg

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 		Dithiocarbamates (Mancozeb, Maneb, Propineb, Metiram, Thiram, Zineb and Ziram collectively estimated as CS2)	AEC/C/SAP/INS/6-4, Issue No.04,Issue date: 01.04.2018 AOAC,Method no. 2007.01,Ch-10	0.01 to 10 mg/kg
   		Monocrotophos Quinolphos Carbaryl Dimethoate Triazophos	AEC/C/SAP/INS/1-1, Issue No.04, Issue date: 01.04.2018 AOAC, Method no. 2007.01,Ch-10	0.01 to 10 mg/kg 0.01 to 10 mg/kg 0.01 to 10 mg/kg 0.01 to 10 mg/kg 0.01 to 10 mg/kg
		Phenthoate Phorate Trichlorfon Carbofuran Fosetyl-Al (sum fosetyl + phosphorous acid and their salts, expressed as fosetyl)		0.01 to 10 mg/kg 0.01 to 10 mg/kg 0.01 to 10 mg/kg 0.01 to 10 mg/kg 0.01 to 10 mg/kg
11.	Carbonated Water	Alfa HCH Beta HCH Gamma HCH (Lindane) Delta HCH	AEC/C/SAP/INS/6-1, Issue No.04,Issue date: 01.04.2018 AOAC, 20 <sup>th</sup> Ed.,2016, Method no. 2007.01,Ch-10	0.01 to 10 mg/kg 0.01 to 10 mg/kg 0.01 to 10 mg/kg 0.01 to 10 mg/kg
		Malathion Chlorpyrifos Alpha-Endosulphan Beta-Endosulphan Endosulphansulphate 2,4 DDE 4,4 DDE		0.01 to 10 mg/kg 0.01 to 10 mg/kg 0.01 to 10 mg/kg 0.01 to 10 mg/kg 0.01 to 10 mg/kg 0.01 to 10 mg/kg 0.01 to 10 mg/kg

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	 	2,4 DDD		0.01 to 10 mg/kg
	 	4,4 DDD		0.01 to 10 mg/kg
	<u> </u>	2,4 DDT		0.01 to 10 mg/kg
	   	4,4 DDT		0.01 to 10 mg/kg
IX.	ANTIBIOTIC RESID	ÜES		
1.	Fruits and Vegetables &	Streptomycin	AEC/C/SAP/INS/1-7, Issue No.04, Issue date:	0.01 to 10 mg/kg
	Fruit and Vegetable Products	Tetracycline	01.04.2018 AOAC,Method no. 2007.01,Ch-10	0.01 to 10 mg/kg
2.	Fish	Tetracycline	AEC/C/SAP/INS/1-7, Issue No.04,Issue date: 01.04.2018 AOAC 983.21	0.01 to 50 mg/kg
		Oxytetracycline	AEC/C/SAP/INS/1-7, Issue No.04, Issue date: 01.04.2018 AOAC 983.21	0.01 to 50 mg/kg
	       	Trimethoprim	AEC/C/SAP/INS/1-7, Issue No.04, Issue date: 01.04.2018 AOAC 983.21	0.01 to 50 mg/kg
		Oxolinic Acid	AEC/C/SAP/INS/1-7, Issue No.04, Issue date: 01.04.2018 AOAC 20 <sup>th</sup> Ed.,2016 983.21	0.01 to 50 mg/kg
<b>X</b> .	SOLID FUELS			
1.	Coal, Coke, Charcoal,	Total Moisture	IS 1350 (Part I) ASTM D3302/D3302M-12	0.1 to 40 g/100g(%)
	Briquettes	Ash	IS 1350 (Part I)	0.1 to 80 g/100g(%)

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	7		ASTM D5142-09	
   	   	Ash Fusibility (DT,ST,HT,FT)	ASTM D1857-04	900 to 1500°C
     	†	Gross Calorific Value	IS 1350 (Part II) ASTM D5865-04	100 to 9000 kcal/kg 100 to 9000 kcal/kg
   	<del> </del>	Hard grove grindability index (HGI)	ASTM D409/D409M-12	20 to 80
   	   	Fixed Carbon	IS 1350 (Part I) ASTM D 5142-09	10 to 99 g/100g(%)
       	 	Volatile Matter	IS 1350 (Part I ASTM D5142-09 ASTM D3175-02	0.4 to 60 g/100g(%) 1 to 50 %
   	 	Total Sulphur	IS 1350 (Part III), ASTM D5373-08	0.1 to 5 g/100 g(%) 0.1 to 5 %
   		Nitrogen	IS 1350 (Part IV), ASTM D5373-08	0.1 to 10 g/100g(%) 0.1 to 10 %
	<del> </del>	Carbon	ASTM D5373-08	1 to 99 g/100 g(%)
	<del> </del>	Hydrogen	ASTM D5373-08	0.1 to 20 g/100 g(%)
	<del> </del>	Inherent/ Residual	1350 (Part I) ASTM D3173-	0.1 to 40 g/100g(%)
		Moisture	11	0.1 to 40 g/100g(%)
	T	Mercury	ASTM D 6414-14	0.04 to 50 mg/kg
       		Moisture of sample Equilibrated to 40°C and 60% RH	IS: 1350 (Part 1)	0.1 to 40 g/100g(%)
   !	   	Proximate Analysis by Thermo-gravimetric	ASTM D 5142-09	0.1 to 40 g/100g(%) (Moisture)
         	 	analyzer analyzer		0.1 to 80 g/100g(%) (Ash) 1 to 50 g/100g(%) (Volatile Matter)
	<del> </del>	Mineral Matter	1350 (Part I)	0.11 to 88 g/100g(%)
H	<del> </del>	lodine value	IS 2752	100 to 1000 mg/kg
∟	┷		LIO 2132	Liou to 1000 mg/kg

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XI.	FERTILIZERS		<del> </del>	
XI.	Nitrogeneous, Phosphatic, Potassic Fertilizer Mixtures & Micronutrients	Moisture Total Nitrogen Ammonia Nitrogen Nitrogen as Urea  Free Acidity Water Insoluble Nitrogen Particle Size Free Phosphoric Acid Water Soluble Phosphates Total Phosphates Potash content Total Chlorides Sodium Zinc Iron Manganese Copper Boron Total Sulphur Elemental Sulphur Arsenic	FCO FCO FCO FCO FCO FCO FCO FCO FCO FCO	0.1 to 10 g/100g(%) 0.1 to 40 g/100g(%) 0.1 to 25 g/100g(%) 0.1 to 50 g/100g(%) 0.1 to 30 g/100g(%) 0.1 to 30 g/100g(%) 0.01 to 7 g/100g(%) 0.01 to 7 g/100g(%) 0.01 to 50 g/100g(%) 0.01 to 50 g/100g(%) 0.01 to 50 g/100g(%) 0.01 to 50 g/100g(%) 0.01 to 50 g/100g(%) 0.01 to 50 g/100g(%) 0.01 to 50 g/100g(%) 0.01 to 50 g/100g(%) 0.01 to 50 g/100g(%) 0.01 to 50 g/100g(%) 1 to 25 g/100g(%) 0.1 to 25 g/100g(%) 0.1 to 10 g/100g(%) 0.1 to 10 g/100g(%) 0.1 to 10 g/100g(%)
	 	Lead Mercury	FCO FCO	2 to 1000 mg/kg 0.1 to 100 mg/kg
	† 	Cadmium Water Insoluble Matter	FCO FCO	0.2 to 100 mg/kg 0.1 to 10 g/100g(%)
<b>2.</b>	Bio-fertilizers, Organic Fertilizers, City Compost,	pH	FCO	2 to 12

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	Vermicompost,		 	
 	Phosphate rich	Moisture	FCO	2 to 50 g/100g (%)
 	Organic manure, Organic Manure, Bio enriched organic manure, Bone Meal	Colour	In-house qualitative method AEC/C/SAP/OF-6, Issue No. 04, Issue date: 01.04.2018	Qualitative
		Odour	In-house qualitative method AEC/C/SAP/OF-6, Issue No. 04, Issue date: 01.04.2018	Qualitative
		Particle Size (4 mm sieve)	In-house method AEC/C/SAP/OF-3, Issue No. 04, Issue date: 01.04.2018	1.0 to 100 %
 	 	Bulk Density	FCO	0.1 to 30 g/cm <sup>3</sup>
 	 	Electrical Conductivity	FCO	1 to 20 dSm <sup>-1</sup>
 	 	Total Organic Carbon	FCO	1 to 35 g/100g(%)
 	 	Total Nitrogen	FCO	0.1 to 25 g/100g (%)
<u></u>	 	Carbon:Nitrogen Ratio	FCO	0.2 to 25
 	 	Total Phosphate	FCO	0.05 to 25 g/100g (%)
 	 	Total Potassium	FCO	0.05 to 10 g/100g (%)
	 	Cadmium	FCO	0.2 to 100 mg/kg
 	 	Copper	FCO	1 to 5000 mg/kg
 	 	Chromium	FCO	2 to 200 mg/kg
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 ┣━━=	 	Nickel	FCO	1.2 to 100 mg/kg
 	 	Zinc	FCO	0.2 to 1000 mg/kg
 	 	Mercury	FCO	0.1 to 10 mg/kg
 	 	Arsenic	FCO	0.2 to 100 mg/kg
XII.	PLASTICS AND PO	LYMERS	 	 
1.	Containers for	Overall Migration Test	IS 9845	0 to 100 mg/L

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       	Packaging of Natural Mineral Water			
L	and Packaged	Water Potability Test	Annex B of IS 15410	Qualitative
<u> </u> ⊢−−−	Drinking Water and		ASTM E 1252	Qualitative
	Alcoholic	Colour Migration	IS 9845	Qualitative
ļ	Beverages			
	(Plastic Bottles,			
	Pouches, Cups,			
<u></u>	Glasses, Jars)			
2.	Polyethylene, PVC, PET, PBT,PP	Overall Migration	IS 9845	0 to 100 mg/L
<u> </u>	Flexible Pouches		[ 	 
[	and Films for the			
İ	Packing of			
 	∣ Natural Mineral		 	
į	Water and			
! 	Packaged		 	
į	Drinking Water			
ľ	and Alcoholic			
	Beverages			
į	Food stuffs,			
 	Pharmaceuticals			
<u> </u>	<u></u>	Water Potability Test	Annex E of IS 15609	Qualitative
 		Material	ASTM E 1252	Qualitative
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XIII.	ANIMAL FEED		 	 
1.	Animal Feed,	Moisture	IS 7874 (Part I)	0.1 to 40g/100g(%)
	Compounded	Total Ash	IS 7874 (Part I)	1 to 20 g/100g
 	Feed,	Crude Protein	IS 7874 (Part I)	0.2 to 40g/100g(%)

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	Dairy Feed,	Crude Fat	IS 7874 (Part I)	0.1 to 5g/100g (%)
[ I	Poultry Feed, Pet	Crude Fibre	IS 7874 (Part I)	0.1 to 5g/100g(%)
	Food,	Acid Insoluble Ash	IS 7874 (Part I)	1.0 to 10g/100g(%)
 	Oil Cake	Sodium	AOAC, Method no.968.08, Ch-4 AEC/C/SAP/INS/4-40 Issue	3 to 5000 mg/kg
	 		no.04, Issue date:01.04.2018	
			AOAC, Method no.984.27 & 2011.14, Ch-50, AEC/C/SAP/NS/3-3 Issue no.04, Issue date:01.04.2018	2.5 to 5000 mg/kg
               		Zinc	AOAC, Method no.968.08, Ch-4, AEC/C/SAP/INS/4-40 Issue no.04, Issue date:01.04.2018	2.5 to 7000 mg/kg
			AOAC, Method no.984.27 & 2011.14, Ch-50, AEC/C/SAP/NS/3-3 Issue no.04, Issue date:01.04.2018	2.5 to 7000 mg/kg
             		Iron	AOAC, Method no.968.08, Ch-4, AEC/C/SAP/INS/4-40 Issue no.04, Issue date:01.04.2018	4 to 5000 mg/kg
			AOAC, Method no.984.27 & 2011.14, Ch-50, AEC/C/SAP/NS/3-3 Issue no.04, Issue date: 01.04.2018	3 to 5000 mg/kg
<u> </u>	<u> </u>	Manganese	AOAC, Method no.968.08,	2.5 to 5000 mg/kg

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         	       		Ch-4,   AEC/C/SAP/INS/4-40   Issue no.04, Issue date:   01.04.2018	
           			AOAC, Method no.984.27 & 2011.14, Ch-50, AEC/C/SAP/NS/3-3 Issue no.04, Issue date: 01.04.2018	1 to 5000 mg/kg
		Copper	AOAC, Method no.968.08, Ch-4 AEC/C/SAP/INS/4-40 Issue no.04, Issue date:01.04.2018	1 to 5000 mg/kg
           			AOAC, Method no.984.27 & 2011.14, Ch-50 AEC/C/SAP/NS/3-3 Issue no.04, Issue date:01.04.2018	1 to 5000 mg/kg
           		Selenium	AOAC, Method no.968.08, Ch-4 AEC/C/SAP/INS/4-40 Issue no.04, Issue date:01.04.2018	0.5 to 500 mg/kg
			AOAC, Method no.984.27, Ch-50 AEC/C/SAP/NS/3-3 Issue no.04, Issue date:01.04.2018	0.1 to 500 mg/kg
XI	AYUSH PRODUCTS			   
1.	Ayurvedic, Herbal and Unani Products	Lead	AOAC, Method no.985.01, Ch-3 AEC/C/SAP/NS/3-5	0.2 to 200 mg/kg

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	<del>                                     </del>	 	Issue no.04, Issue date:01.04.2018	
		Cadmium	AOAC, Method no.985.01, Ch-3 AEC/C/SAP/NS/3-5 Issue no.04, Issue date:01.04.2018	0.1 to 200 mg/kg
	   	Copper	API Part 2, Volume 3	0.08 to 100 mg/kg or mg/l
	<u> </u>	Arsenic	API Part 2, Volume 3	0.1 to 100 mg/kg
     	     	Mercury	API Part 2, Volume 3	0.1 to 100 mg/kg
		Loss on drying at 105°C	API Part 2, Vol 3	0.02 % to 35%
	<del> </del>	Total Ash	API Part 2, Vol 3	0.01 % to 98%
	T	Acid insoluble ash	API Part 2, Vol 3	0.02 % to 95%
	T	Alcohol Soluble Extractive	API Part 2, Vol 3	0.5 % to 65%
		Water Soluble Extractive	API Part 2, Vol 3	0.5 % to 85%
		pH 1% Soln.	API Part 2, Vol 3	1 to 12

\*NOTE: The Laboratory has demonstrated competence for the stated scope for WATER. This however <u>does not fully cover</u>the specification requirements of BIS for the Packaged Drinking Water as per IS:14543 and the Packaged Natural Mineral Water IS:13428.

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		MECHANIC	AL TESTING	
I.	PLASTICS AND PO	LYMERS		
1.	Containers for Packaging of Natural Mineral Water and	Verification of Manufacture, Workmanship, Finish and Appearance	IS 15410	Qualitative
	Packaged Drinking Water (Plastic Cups,	Capacity (Brimful and Nominal)	Clause 5 of IS 2798	100 to 1000 ml 1000 to 5000 ml 5000 to 25000ml
	Glasses, Bottles, Jars)	Wall Thickness	Clause 4.5 of IS 2798	0.01 to 5 mm
		Transparency Leakage Test a. Vibration Leakage b. Closure Leakage c. Air pressure Leakage	Annex A of IS 15410 Clause 6 of IS 2798	1 to 100 % Qualitative
	 	Drop Test at Ambient Temperature	Clause 8 of IS 2798	Qualitative
		Design, Shape and Dimension	IS 15410	Qualitative
2.	Polyethylene	Stack Load Test	Annex F of IS 15609	Qualitative
	Flexible Pouches	Drop Test	Annex G of IS 15609	Qualitative
	and Films for the Packing of	Ink Adhesion Test for Printed Pouch	Annex H of IS 15609	Qualitative
	Natural Mineral Water	Product Resistance Test for Printed Pouch	Annex J of IS 15609	Qualitative
	and Packaged	Description	Clause 6.1.1 of IS 15609	Qualitative
	Drinking Water	Odour	Clause 6.1.4 of IS 15609	Qualitative

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
1	] 	Thickness of the Film	A-2 of IS 2508	1μm to1000μm
I		Width	Clause 6.1.6 of IS 15609	25 to 600 mm
		Film Form	IS 15609	Qualitative
		Winding of the Film	IS 15609	Qualitative