

Laboratory Nawal Analytical Laboratories, Plot No. 100, New SIDCO Industrial Estate, Srinagar, Hosur, Tamil Nadu

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-5834

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Validity 05.04.2018 to 04.04.2020

Last Amended on 06.12.2018

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
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BIOLOGICAL TESTING

I.	FOOD & AGRICULTURAL PRODUCTS			
1.	Fruit & Fruit Products, Vegetable & Vegetable Products (Raw & Processed)	Total Plate Count	IS 5402	≥10 cfu/g
		Total Plate Count	ISO 4833:(Part-1)	≥10 cfu/g
		Coliforms	IS 5401 (Part 1)	≥10 cfu/g
		Coliforms	ISO 4832	≥10 cfu/g
		<i>Escherichia coli</i>	IS 5887 (Part 1)	Qualitative (Present or Absent)/g or 0.1 g
		<i>Escherichia coli</i>	ISO 16649(Part-2)	≥10 cfu / g
		<i>Staphylococcus aureus</i>	IS 5887 (Part 2)	Qualitative (Present or Absent)/25 g
		<i>Staphylococci (Staphylococcus aureus and other species)</i>	ISO 6888(Part-1)	≥10 cfu / g
		<i>Faecal streptococci</i>	IS 5887 (Part 2)	≥10 cfu/g
		Salmonella	IS 5887 (Part 3)	Qualitative (Present or Absent)/25 g
		Salmonella spp.	ISO 6579	Qualitative (Present or Absent)/25 g
		Shigella	IS 5887 (Part 7)	Qualitative (Present or Absent)/25 g
		Shigella spp.	ISO 21567	Qualitative (Present or Absent)/25 g
		<i>Bacillus cereus</i>	IS 5887 (Part 6)	≥10 cfu/g
		<i>Clostridium perfringens</i>	APHA 5 th Edition Chapter 33 (Clause. 33.71)	Qualitative (Present or Absent)/25g
<i>Clostridium perfringens</i>	ISO 7937	≥10 cfu / g		
Yeast and mould	IS 5403	≥10 cfu/g		
Yeast and mould	ISO 21527-1	≥10 cfu/g		

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		<i>Listeria monocytogenes</i>	USFDA (BAM) 8th Edition , Chapter 10	Qualitative (Present or Absent)/25g
		<i>Listeria monocytogenes</i>	ISO 11290-1	Qualitative (Present or Absent)/25 g
		<i>Vibrio cholerae</i>	ISO 21872-1	Qualitative (Present or Absent) /25g
		<i>Vibrio parahaemolyticus</i>	ISO 21872-1	Qualitative (Present or Absent) /25g
2.	Milk and Dairy Products (Raw and Processed)	Total Plate Count	IS 5402	≥10 cfu/g ≥1 cfu/ml
		Total Plate Count	ISO 4833:(Part-1)	≥10 cfu/g ≥1 cfu/ml
		Total Plate Count	USFDA (BAM) 8th Edition , Chapter 3	≥10 cfu/g ≥1 cfu/ml
		Coliforms	IS 5401 (Part 1)	≥10 cfu/g ≥1 cfu/ml
		Coliforms	APHA 5th Edition Chapter 9 (Clause. 9.7.3,9.7.4)	≥10 cfu/g ≥1 cfu/ml
		Coliforms	APHA 5th Edition Chapter 9 (Clause. 9.7.1)	MPN 3/g or ml ; <3 to 1100
		Coliforms	ISO 4832	≥10 cfu/g ≥1 cfu/ml
		Enterobacteriaceae	APHA 5th Edition 2015 Chapter 9 (Clause. 9.62)	≥10 cfu/g ≥1 cfu/ml
		<i>Escherichia coli</i>	IS 5887 (Part 1)	Qualitative (Present or Absent)/g or ml/ 0.1 g or 0.1 ml
		<i>Escherichia coli</i>	ISO 16649(Part-2)	≥10 cfu/g
		<i>Escherichia coli</i>	ISO 16649(Part-2)	≥1 cfu/ml
		<i>Escherichia coli</i>	APHA 5th Edition Chapter 9 (Clause. 9.9.1)	<3 to 1100 MPN/g/ml
		<i>Escherichia coli</i>	IS 5887 (Part 1)	Qualitative (Present or Absent)/g or ml/ 0.1 g or 0.1 ml

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		Faecal Coliform	APHA 5th Edition Chapter 9 (Clause. 9.8.1)	MPN 3/g or ml; <3 to >1100
		<i>Staphylococcus aureus</i>	IS 5887 (Part 2)	Qualitative (Present or Absent)/25 g or 25 ml
		<i>Staphylococcus aureus</i>	IS 5887(Part 2)	≥10 cfu/g ≥1 cfu/ml
		<i>Staphylococcus aureus</i>	ISO 6888(Part-1)	≥10 cfu/g ≥1 cfu/ml
		<i>Staphylococcus aureus</i>	USFDA (BAM) 8th Edition, Chapter 12	≥10 cfu/g ≥1 cfu/ml
		<i>Faecal streptococci</i>	IS 5887 (Part 2)	≥10 cfu/g ≥1 cfu/ml
		Salmonella spp.	IS 5887 (Part 3)	Qualitative(Present or Absent)/25 g or 25 ml
		Salmonella spp.	ISO 6579	Qualitative(Present or Absent)/25 g or 25 ml
		Salmonella spp.	USFDA(BAM) 8 th Edition Chapter 5	Qualitative(Present or Absent)/25 g or 25 ml
		Shigella spp.	IS 5887 (Part 7)	Qualitative(Present or Absent)/25 g or 25 ml
		Shigella spp.	ISO 21567	Qualitative(Present or Absent)/25 g or 25 ml
		Shigella spp.	USFDA (BAM) 8th Edition ,Chapter 6	Qualitative(Present or Absent)/25 g or 25 ml
		<i>Bacillus cereus</i>	IS 5887 (Part 6)	≥10 cfu/g ≥1 cfu/ml
		<i>Bacillus cereus</i>	APHA 5th Edition Chapter 31 (Clause. 31.6)	≥10 cfu/g ≥1 cfu/ml
		<i>Clostridium perfringens</i>	IS 5887 (Part 4)	≥10 cfu/g ≥1 cfu/ml
		<i>Clostridium perfringens</i>	ISO 7937	≥10 cfu/g ≥1 cfu/ml
		sulfite-reducing bacteria	ISO 15213	≥10 cfu/g

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		<i>Clostridium perfringens</i>	APHA 5th Edition Chapter 33(Clause. 33.71)	Qualitative(Present or Absent)/25 g/25ml
		Thermophilic bacteria	SMEDP, APHA (17th Edition): Chapter 8 (Clause. 8.040)	≥10 cfu/g ≥1 cfu/ml
		Thermoduric bacteria	SMEDP, APHA (17th Edition): Chapter 8 (Clause. 8.030)	≥10 cfu/g ≥1 cfu/ml
		Lactic acid bacteria	SMEDP,APHA (17 th Edition):(Clause.8.071) Chapter-8	≥10 cfu/g ≥1 cfu/ml
		Yeast and mould	IS 5403	≥10 cfu/g ≥1 cfu/ml
		Yeast and mould	ISO 21527-1	≥10 cfu/g ≥1 cfu/ml
		Yeast and mould	APHA 5th Edition Chapter 21 (Clause.21.51)	≥10 cfu/g ≥1 cfu/ml
		<i>Vibrio cholerae</i>	ISO 21872-1	Qualitative(Present or Absent)/25 g or 25 ml
		<i>Vibrio cholera</i>	APHA 5th Edition Chapter 40 (Clause. 40.6112)	Qualitative(Present or Absent)/25 g or 25 ml
		<i>Vibrio parahaemolyticus</i>	ISO 21872-1	Qualitative(Present or Absent)/25 g or 25 ml
		<i>Vibrio parahaemolyticus</i>	APHA 5th Edition Chapter 40 (Clause. 40.6214)	MPN 3/g or ml <3 to 1100
		<i>Vibrio vulnificus</i>	APHA 5th Edition Chapter 40 (Clause. 40.6313)	MPN 3/g or ml <3 to 1100
		<i>Listeria monocytogenes</i>	IS 14988(Part-2)	≥10 cfu/g ≥1 cfu/ml
		<i>Listeria monocytogenes</i>	IS14988 (Part 1)	Qualitative (Present or Absent)/ g or ml
		<i>Listeria monocytogenes</i>	ISO 11290-1	Qualitative(Present or Absent)/25 g or 25 ml

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		<i>Listeria monocytogenes</i>	USFDA (BAM) 8th Edition , Chapter 10	Qualitative(Present or Absent)/25 g or 25 ml
3.	Meat & Meat Products (Raw And Processed)	Total Plate Count	IS 5402	≥10 cfu/g
		Coliforms	IS 5401 (Part 1)	≥10 cfu/g
		<i>Escherichia coli</i>	IS 5887 (Part 1)	Qualitative (Present or Absent)/g or 0.1 g
		<i>Staphylococcus aureus</i>	IS 5887 (Part 2)	Qualitative (Present or Absent)/25 g
		<i>Faecal streptococci</i>	IS 5887 (Part 2)	≥10 cfu/g
		Salmonella spp.	IS 5887 (Part 3)	Qualitative (Present or Absent)/25 g
		Shigella spp.	IS 5887 (Part 7)	Qualitative (Present or Absent)/25 g
		<i>Bacillus cereus</i>	IS 5887 (Part 6)	≥10 cfu/g
		<i>Clostridium perfringens</i>	APHA 5 th Edition(Clause. 33.71) Chapter 33	Qualitative (Present or Absent)/25 g
		Yeast and mould	IS 5403	≥10 cfu/g
		<i>Listeria monocytogenes</i>	USFDA (BAM) 8th Edition , Chapter 10	Qualitative (Present or Absent)/25 g
4.	Canned And Processed Foods	Total Plate Count	IS 5402	≥10 cfu/g
		Coliforms	IS 5401 (Part 1)	≥10 cfu/g
		<i>Escherichia coli</i>	IS 5887 (Part 1)	Qualitative(Present or Absent)/g or 0.1 g
		<i>Staphylococcus aureus</i>	IS 5887 (Part 2)	Qualitative (Present or Absent)/25 g
		<i>Faecal streptococci</i>	IS 5887 (Part 2)	≥10 cfu/g
		Salmonella spp.	IS 5887 (Part 3)	Qualitative (Present or Absent)/25 g
		Shigella spp.	IS 5887 (Part 7)	Qualitative(Present or Absent)/25 ml/25g
		<i>Bacillus cereus</i>	IS 5887 (Part 6)	≥10 cfu/g
		<i>Clostridium perfringens</i>	APHA (5th Edition) Chapter 33(Clause. 33.71)	Qualitative (Present or Absent)/25 g

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		Yeast and mould	IS 5403	≥10 cfu/g
		<i>Listeria monocytogenes</i>	USFDA (BAM) 8th Edition , Chapter 10	Qualitative (Present or Absent)/25 g
5.	Fruit juices and pulps	Total Plate Count	IS 5402	≥1 cfu/ml ≥10 cfu/g
		Coliforms	IS 5401 (Part 1)	≥1 cfu/ml ≥10 cfu/g
		<i>Escherichia coli</i>	IS 5887 (Part 1)	Qualitative (Present or Absent)/ml or 0.1 ml/g/0.1g
		<i>Staphylococcus aureus</i>	IS 5887 (Part 2)	Qualitative(Present or Absent)/25ml/25g
		<i>Faecal streptococci</i>	IS 5887 (Part 2)	≥1 cfu/ml ≥10 cfu/g
		Salmonella spp.	IS 5887 (Part 3)	Qualitative (Present or Absent)/25ml/25g
		Shigella spp.	IS 5887 (Part 7)	Qualitative (Present or Absent)/25 ml/25g
		<i>Bacillus cereus</i>	IS 5887 (Part 6)	≥1 cfu/ml ≥10 cfu/g
		<i>Clostridium perfringens</i>	APHA 5th Edition Chapter 33(Clause. 33.71)	Qualitative (Present or Absent)/25 ml/25g
		Yeast and mould	IS 5403	≥1 cfu/ml ≥10 cfu/g
		<i>Listeria monocytogenes</i>	USFDA (BAM) 8th Edition , Chapter 10	Qualitative (Present or Absent)/25 ml/25g
6.	Nut & Nut Products	Total Plate Count	IS 5402	≥10 cfu/g
		Total Aerobic Microbial Count/Aerobic Plate	ISO 4833:(Part-1)	≥10 cfu/g
		Coliforms	IS 5401 (Part 1)	≥10 cfu/g
		Coliforms	ISO 4832	≥10 cfu/g

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		<i>Escherichia coli</i>	IS 5887 (Part 1)	Qualitative (Present or Absent)/g or 0.1 g
		<i>Escherichia coli</i>	ISO 16649(Part-2)	≥10 cfu / g
		<i>Staphylococcus aureus</i>	ISO 6888(Part-1)	≥10 cfu / g
		Salmonella spp.	IS 5887 (Part 3)	Qualitative (Present or Absent)/25 g
		Salmonella spp.	ISO 6579	Qualitative (Present or Absent)/25 g
		Shigella spp.	ISO 21567	Qualitative (Present or Absent)/ 25g
		Yeast and Mould	IS 5403	≥10 cfu/g
		Yeast and Mould	ISO 21527-2	≥10 cfu/g
		<i>Clostridium perfringens</i>	ISO 7937	≥10 cfu / g
		<i>Vibrio cholerae</i>	ISO 21872-1	Qualitative (Present or Absent) /25g
		<i>Vibrio parahaemolyticus</i>	ISO 21872-1	Qualitative (Present or Absent) /25g
7.	Cereals And Pulses ,Food Grains (Raw and Processed)	Total Plate Count	IS 5402	≥10 cfu/g
		Total Plate Count	ISO 4833:(Part-1)	≥10 cfu/g
		Yeast and Mould	IS 5403	≥10 cfu/g
		Yeast and Mould	ISO 21527-2	≥10 cfu/g
		<i>Staphylococcus aureus</i>	IS 5887 (Part 2)	Qualitative (Present or Absent)/25 g
		<i>Staphylococcus aureus</i>	ISO 6888(Part-1)	≥10 cfu / g
		<i>Clostridium perfringens</i>	APHA 5th Edition Chapter 33(Clause. 33.71)	Qualitative (Present or Absent)/25 g
		<i>Clostridium perfringens</i>	ISO 7937	≥10 cfu / g
		Coliforms	IS 5401 (Part 1)	≥10 cfu/g
		Coliforms	ISO 4832	≥10 cfu/g
		Salmonella spp.	IS 5887 (Part 3)	Qualitative (Present or Absent)/25 g
		Salmonella spp.	ISO 6579	Qualitative (Present or Absent)/25 g

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		<i>Escherichia coli</i>	IS 5887 (Part 1)	Qualitative (Present or Absent)/g or 0.1 g
		<i>Escherichia coli</i>	ISO 16649(Part-2)	≥10 cfu / g
		Shigella spp.	ISO 21567	Qualitative (Present or Absent) /25g
8.	Bakery & Confectionery Products	Total Plate Count	IS 5402	≥10 cfu/g
		Yeast and Mould	IS 5403	≥10 cfu/g
		<i>Staphylococcus aureus</i>	IS 5887 (Part 2)	Qualitative (Present or Absent)/25 g
		<i>Clostridium perfringens</i>	APHA (5th Edition) Chapter 33 (Clause. 33.71)	Qualitative (Present or Absent)/25 g
		Coliforms	IS 5401 (Part 1)	≥10 cfu/g
		Salmonella spp.	IS 5887 (Part 3)	Qualitative (Present or Absent)/25 g
		<i>Escherichia coli</i>	IS 5887 (Part 1)	Qualitative (Present or Absent)/g or 0.1 g
9.	Spice & Spice Products, Herbals And Condiments	Salmonella spp.	IS 5887 (Part 3)	Qualitative (Present or Absent)/25 g
		Salmonella spp.	ISO 6579	Qualitative(Present or Absent)/25 g
		Total Plate Count	IS 5402	≥10 cfu/g
		Total Plate Count	ISO 4833:(Part-1)	≥10 cfu/g
		Coliforms	ISO 4832	≥10 cfu/g
		<i>Staphylococcus aureus</i>	IS 5887 (Part 2)	Qualitative (Present or Absent)/25 g
		<i>Staphylococcus aureus</i>	ISO 6888(Part-1)	≥10 cfu / g
		Yeast &mould count	IS 5403	≥10 cfu/g
		Yeast &mould count	ISO 21527-2	≥10 cfu/g
		<i>Escherichia coli</i>	IS 5887 (Part 1)	Qualitative (Present or Absent)/g or 0.1 g

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		<i>Escherichia coli</i>	ISO 16649(Part-2)	≥10 cfu / g
		<i>Clostridium perfringens</i>	ISO 7937	≥10 cfu / g
		<i>Bacillus cereus</i>	APHA 5th Edition (Clause. 31.6) Chapter 31	≥10 cfu / g
		Enterobacteriaceae	IS/ISO/7402,ISO 11290-1	≥10 cfu / g
10.	Coffee & Cocoa products	Yeast and Mould	IS 5403	≥10 cfu/g
		Yeast and Mould	ISO 21527-2	≥10 cfu/g
		Total Plate Count	IS 5402	≥10 cfu/g
		Total Plate Count	ISO 4833:(Part-1)	≥10 cfu/g
		Coliforms	IS 5401 (Part 1)	≥10 cfu/g
		Coliforms	ISO 4832	≥10 cfu/g
		Salmonella spp.	IS 5887 (Part 3)	Qualitative (Present or Absent)/25 g
		Salmonella spp.	ISO 6579	Qualitative (Present or Absent)/25 g
		<i>Escherichia coli</i>	IS 5887 (Part 1)	Qualitative (Present or Absent)/g or 0.1 g
				<i>Escherichia coli</i>
		<i>Staphylococcus aureus</i>	ISO 6888 (Part-1)	≥10 cfu / g
		<i>Clostridium Perfringens</i>	ISO 7937	≥10 cfu / g
		<i>Bacillus cereus</i>	APHA 5 th Edition Chapter 31 (Clause. 31.6)	≥10 cfu / g
		Enterobacteriaceae	IS/ISO/7402	≥10 cfu / g
11.	Tea	Yeast and Mould	IS 5403	≥10 cfu/g
		Yeast and Mould	ISO 21527-2	≥10 cfu/g
		Total Plate Count	IS 5402	≥10 cfu/g
		Total Plate Count	ISO 4833	≥10 cfu/g
		Coliforms	IS 5401 (Part 1)	≥10 cfu/g
		Coliforms	ISO 4832	≥10 cfu/g
		Salmonella spp.	IS 5887 (Part 3)	Qualitative (Present or Absent)/25 g
		Salmonella spp.	ISO 6579	Qualitative (Present or Absent)/25 g

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		<i>Escherichia coli</i>	IS 5887 (Part 1)	Qualitative (Present or Absent)/g or 0.1 g
		<i>Escherichia coli</i>	ISO 16649(Part-2)	≥10 cfu/g
		<i>Staphylococcus aureus</i>	ISO 6888(Part-1)	≥10 cfu / g
		<i>Clostridium perfringens</i>	ISO 7937	≥10 cfu / g
		<i>Bacillus cereus</i>	APHA 5th Edition, Chapter 31 (Clause. 31.6)	≥10 cfu / g
		Enterobacteriaceae	IS/ISO 7402	≥10 cfu / g
		<i>Listeria monocytogenes</i>	ISO 11290-1	Qualitative (Present or Absent)/25g
12.	Ready To Eat Foods (Snacks And Instant Mixes)	Total Plate Count	IS 5402	≥10 cfu/g
		<i>Escherichia coli</i>	IS 5887 (Part 1)	Qualitative (Present or Absent)/g or 0.1g
		<i>Staphylococcus aureus</i>	IS 5887 (Part 2)	Qualitative (Present or Absent)/25 g
		<i>Bacillus cereus</i>	IS 5887 (Part 6)	≥10 cfu/g
		Salmonella	IS 5887 (Part 3)	Qualitative (Present or Absent)/25 g
13.	Beverages(Alcoholic And Non Alcoholic)	Total Plate Count	IS 5402	≥1 cfu/ml
		Coliforms	IS 5401 (Part 1)	≥1 cfu/ml
		Yeast and mould	IS 5403	≥1 cfu/ml
14.	Cooked Food	Total Plate Count	IS 5402	≥10 cfu/g ≥1 cfu/ml
		Coliforms	IS 5401 (Part 1)	≥10 cfu/g ≥1 cfu/ml
		<i>Staphylococcus aureus</i>	IS 5887 (Part 2)	Qualitative (Present or Absent)/25 g or 25 ml
		<i>Escherichia coli</i>	IS 5887 (Part 1)	Qualitative (Present or Absent)/g or ml/ 0.1 g or 0.1 ml

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		Salmonella spp.	IS 5887 (Part 3)	Qualitative (Present or Absent)/25 g or 25 ml
		Yeast and mould	IS 5403	≥10 cfu/g ≥1 cfu/ml
15.	Food Additives And Preservatives	Total Plate Count	IS 5402	≥10 cfu/g ≥1 cfu/ml
		Coliforms	IS 5401 (Part 1)	≥10 cfu/g ≥1 cfu/ml
		<i>Escherichia coli</i>	IS 5887 (Part 1)	Qualitative (Present or Absent)/g or ml/ 0.1 g or 0.1 ml
		Salmonella spp.	IS 5887 (Part 3)	Qualitative (Present or Absent)/25 g or 25 ml
		Yeast and mould	IS 5403	≥10 cfu/g ≥ 1 cfu/ml
16	Prawn & Prawn Products, Fish & Fish Products, Shrimps.	Total Plate Count	IS 5402	≥10 cfu/g
		Total Plate Count	ISO 4833:(Part-1)	≥10 cfu/g
		Aerobic Plate Count	USFDA (BAM) 8th Edition , Chapter 3	≥10 cfu/g
		Enterobacteriaceae	APHA 5th Edition Chapter 9 (Clause. 9.62)	≥10 cfu/g
		Coliforms	IS 5887 (Part 1)	≥10 cfu/g
		Coliforms	ISO 4832	
		Coliforms	APHA 5th Edition Chapter 9 (Clause. 9.7.3,9.7.4)	≥10 cfu/g
		Coliforms	APHA 5th Edition Chapter 9 (Clause. 9.7.1)	MPN 3/g or ml ; <3 to 1100
		Faecal coliforms	APHA 5th Edition Chapter 9 (Clause. 9.8.1)	MPN 3/g or ml <3 to 1100
		<i>Escherichia coli</i>	IS 5887 (Part 1)	Qualitative (Present or Absent)/g or 0.1 g

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		<i>Escherichia coli</i>	ISO 16649(Part-2)	≥10 cfu / g
		<i>Escherichia coli</i>	USFDA (BAM) 8th Edition Chapter 4	<1.8 to 1600
		<i>Staphylococcus aureus</i>	IS 5887 (Part 2)	Qualitative (Present or Absent)/25 g
		<i>Staphylococcus aureus</i>	ISO 6888(Part-1)	≥10 cfu / g
		<i>Staphylococcus aureus</i>	USFDA (BAM) 8th Edition , Chapter 12	≥10 cfu / g
		<i>Faecal streptococci</i>	IS 5887 (Part 2)	≥10 cfu/g
		Salmonella spp.	IS 5887 (Part 3)	Qualitative (Present or Absent)/25 g
		Salmonella spp.	ISO 6579	Qualitative (Present or Absent)/25 g
		Salmonella spp.	USFDA (BAM) 8th Edition Chapter 5	Qualitative (Present or Absent)/25 g
		Shigella spp.	IS 5887 (Part 7)	Qualitative (Present or Absent)/25 g
		Shigella spp.	ISO 21567	Qualitative (Present or Absent)/25 g
		Shigella spp.	USFDA (BAM) 8th Edition , Chapter 6	Qualitative (Present or Absent)/25 g
		<i>Bacillus cereus</i>	IS 5887 (Part 6)	≥10 cfu/g
		<i>Bacillus cereus</i>	APHA 5th Edition Chapter 31 (Clause. 31.6)	≥10 cfu/g
		<i>Clostridium perfringens</i>	ISO 7937	≥10 cfu/g
		<i>Clostridium perfringens</i>	APHA 5th Edition, Chapter 33(Clause. 33.71)	Qualitative (Present or Absent)/25 g
		Yeast and mould	IS 5403	≥10 cfu/g
		Yeast and mould	ISO 21527-1	≥10 cfu/g
		Yeast and mould	APHA 5th Edition, Chapter 21 (Clause.21.51)	≥10 cfu/g
		Yeast and mould	USFDA (BAM) 8th Edition Chapter18	≥10 cfu/g

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		<i>Vibrio cholerae</i>	IS 5887 (Part 5)	Qualitative (Present or Absent)/25 g
		<i>Vibrio cholerae</i>	ISO 21872-1	Qualitative (Present or Absent)/25 g
		<i>Vibrio cholera</i>	APHA 5th Edition, Chapter 40 (Clause. 40.6112)	Qualitative (Present or Absent)/25 g
		<i>Vibrio cholerae</i>	USFDA (BAM) 8th Edition Chapter 9	Qualitative Present or Absent)/25 g
		<i>Vibrio parahaemolyticus</i>	IS 5887 (Part 5)	Qualitative (Present or Absent)/25 g
		<i>Vibrio parahaemolyticus</i>	ISO 21872-1	Qualitative (Present or Absent)/25 g
		<i>Vibrio parahaemolyticus</i>	APHA 5th Edition, Chapter 40 (Clause. 40.6214)	MPN 3/g <3 to 1100
		<i>Vibrio vulnificus</i>	APHA 5th Edition, Chapter 40 (Clause. 40.6313)	MPN 3/g; <3 to >1100
		<i>Listeria monocytogenes</i>	USFDA (BAM) 8th Edition , Chapter 10	Qualitative (Present or Absent)/25 g
		<i>Listeria monocytogenes</i>	ISO 11290-1	Qualitative (Present or Absent)/25 g
II.	WATER			
1.	Packaged Drinking Water (Other than Packaged Natural Mineral Water)	Aerobic Microbial Count @ 37 °C	IS 5402	≥ 1 cfu/ ml
		Aerobic Microbial Count @ 20-22 °C	IS 5402	≥ 1 cfu/ ml
		Coliforms	IS 15185	Qualitative (Present or Absent)/ 250ml
		Coliforms	IS 5401 (Part 1)	≥ 1 cfu/ ml
		<i>Escherichia coli</i>	IS 15185	Qualitative (Present or Absent)/ 250ml
		<i>Escherichia coli</i>	IS 5887 (Part 1)	Qualitative

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				(Present or Absent)/ 250ml
		<i>Faecal streptococci</i>	IS 15186	Qualitative (Present or Absent)/ 250ml
		<i>Faecal streptococci</i>	IS 5887 (Part 2)	Qualitative (Present or Absent)/ 250ml
		<i>Staphylococcus aureus</i>	IS 5887 (Part 2)	Qualitative (Present or Absent)/ 250ml
		Salmonella spp.	IS 15187	Qualitative (Present or Absent) /250 ml
		Shigella spp.	IS 5887 (Part 7)	Qualitative (Present or Absent)/ 250ml
		<i>Pseudomonas aeruginosa</i>	IS 13428 (Annexure D)	Qualitative (Present or Absent)/ 250ml
		Sulphite reducing anaerobes	IS 13428 (Annexure C)	Qualitative (Present or Absent)/ 50 ml
		<i>Vibrio cholerae</i>	IS 5887 (Part 5)	Qualitative (Present or Absent)/ 250 ml
		<i>Vibrio parahaemolyticus</i>	IS 5887 (Part 5)	Qualitative (Present or Absent)/ 250 ml
		Yeast and Mould	IS 5403	Qualitative (Present or Absent)/ 250 ml
2.	Packaged Natural Mineral Water	Coliforms	IS 15185	Qualitative (Present or Absent)/ 250ml

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		Coliforms	IS 5401 (Part 1)	≥ 1 cfu/ ml
		<i>Escherichia coli</i>	IS 15185	Qualitative (Present or Absent)/ 250ml
		<i>Escherichia coli</i>	IS 5887 (Part 1)	Qualitative (Present or Absent)/ 250ml
		<i>Faecal streptococci</i>	IS 15186	Qualitative (Present or Absent)/ 250ml
		<i>Faecal streptococci</i>	IS 5887 (Part 2)	Qualitative (Present or Absent)/ 250ml
		<i>Staphylococcus aureus</i>	IS 5887 (Part 2)	Qualitative (Present or Absent)/ 250ml
		Salmonella spp.	IS 15187	Qualitative (Present or Absent) /250 ml
		Shigella spp.	IS 5887 (Part 7)	Qualitative (Present or Absent)/ 250ml
		<i>Pseudomonas aeruginosa</i>	IS 13428 (Annexure D)	Qualitative (Present or Absent)/ 250ml
		Sulphite reducing anaerobes	IS 13428 (Annexure C)	Qualitative (Present or Absent)/ 50 ml
		<i>Vibrio cholerae</i>	IS 5887 (Part 5)	Qualitative (Present or Absent)/ 250 ml
		<i>Vibrio parahaemolyticus</i>	IS 5887 (Part 5)	Qualitative (Present or Absent)/ 250 ml

Vinay Kumar Tyagi
Convenor

Mallika Gope
Program Manager

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		Yeast and Mould	IS 5403	Qualitative (Present or Absent)/ 250 ml
3.	Drinking Water	Standard Plate Count	IS 1622	≥ 1cfu/ ml
		Total Coliforms bacteria	IS 1622	(<2 MPN to 1600 MPN)/100 ml
		Total Coliforms bacteria	IS 1622	(<1 to 161 MPN)/ 100ml
		Thermotolerent Coliforms (Faecal Coliforms)	IS 1622	(<2 MPN to 1600 MPN)/100 ml
		Thermotolerent Coliforms (Faecal Coliforms)	IS 1622	(<1 to 161 MPN) / 100ml
		<i>Escherichia coli</i>	IS 1622	(<2 MPN to 1600 MPN)/100 ml
		<i>Escherichia coli</i>	IS 1622	(<1 to 161 MPN)/ 100ml
4.	Quality Tolerances For Water For Processed Food Industry	Proteolytic organism	IS 4251 (Appendix A)	≥ 1 cfu/ml
		Lipolytic organism	IS 4251 (Appendix A)	≥ 1 cfu/ml
		Thermophilic bacteria count	IS 4251 (Appendix B)	≥ 1 cfu/ml
		Coliforms bacteria MPN Method	IS 1622	(<2 MPN to >1600 MPN)/100 ml
				(<1 to >161 MPN)/ 100ml
		Standard Plate Count	IS 1622	≥ 1 cfu/ml
5.	Water	Total Plate Count	APHA (22 nd Edition) 9215B	≥ 1 cfu/ml
		Colony count @ 37 °C	ISO 6222	≥ 1Cfu/ ml
		Colony count@ 22 °C	ISO 6222	≥ 1Cfu/ ml
		Coliforms	IS 15185 (ISO 9308-1)	Qualitative (Present or Absent)/ 250ml
		Coliforms	ISO 9308-1	Qualitative (Present or Absent)/ 250ml
		Coliforms	ISO 9308-1	≥ 1 cfu / ml

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		<i>Escherichia coli</i>	IS 15185(ISO 9308-1)	Qualitative (Present or Absent)/ 250ml
		<i>Escherichia coli</i>	ISO 9308-1	Qualitative (Present or Absent)/ 250ml
		<i>Escherichia coli</i>	ISO 9308-1	≥ 1 cfu / ml
		Enterococcus (<i>Faecal streptococci</i>)	IS 15186 (ISO 7899-2)	Qualitative (Present or Absent)/ 250ml
		Enterococcus (<i>Faecal streptococci</i>)	ISO 7899-2	Qualitative (Present or Absent)/ 250ml
		Enterococcus (<i>Faecal streptococci</i>)	ISO 7899-2	≥ cfu / ml
		Salmonella	IS 15187(ISO 6340)	Qualitative (Present or Absent)/ 250ml
		<i>Pseudomonas aeruginosa</i>	IS 13428 (Annexure D)	Qualitative (Present or Absent)/ 250ml
		<i>Pseudomonas aeruginosa</i>	ISO 16266	Qualitative (Present or Absent)/ 250ml
		<i>Pseudomonas aeruginosa</i>	ISO 16266	≥ 1 cfu / ml
		<i>Clostridium perfringens</i> (Including spores)	IS 13428 (Annexure C)	Qualitative (Present or Absent)/ 50 ml
		<i>Clostridium perfringens</i>	ISO 14189	Qualitative (Present or Absent)/ 250ml
		<i>Clostridium perfringens</i> (Including spores)	ISO 14189	≥ 1 cfu / ml

Vinay Kumar Tyagi
Convenor

Mallika Gope
Program Manager

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III.	ENVIRONMENT AND POLLUTION			
1.	Air Sampling-Settle Plate, Air sampler) Environmental Monitoring	Total Aerobic Microbial Count/Aerobic Plate Count/ Total Plate Count/Standard Plate Count/Total Bacterial Count	NAL/MBL/SOP/007, Issue no:01, Issue date :18.05.2015, Rev No:01, Dated:31.07.2017	≥ 1 cfu /L ≥ 1 cfu /m ³
		Total yeast and mould count	NAL/MBL/SOP/007 Issue no 01, Issue date 18.05.2015, Rev No:01, Dated:31.07.2017	≥ 1 cfu u/L ≥ 1 cfu /m ³
2.	Bio Burden Estimation of Classified and Non Classified Areas (Machineries, Personnel Swab, Hand Swab, Contact Plate (Finger Dab Method), Uniform Swab, Equipment Swab, Sanitization Efficiency of Equipments, Machine Parts Used In Production Area, Material Swab, Cooking Platforms, Cooking Accessories, Floor Swab	Total Aerobic Microbial Count/Aerobic Plate Count/Total Plate Count/ Standard Plate Count/ Total Bacterial Count	NAL/MBL/SOP/024, Issue. 01, Issue Dated. 18.05.2015, Rev No:01, Dated:31.07.2017	≥1 cfu/cm ² ≥1 cfu /swab
		Coliforms	NAL/MBL/SOP/024, Issue. 01, Issue Dated. 18.05.2015, Rev No:01, Dated:31.07.2017	≥1 cfu/cm ² ≥1 cfu /swab
		<i>Escherichia coli</i>	NAL/MBL/SOP/024, Issue. 01, Issue Dated. 18.05.2015, Rev No:01, Dated:31.07.2017	Qualitative (Present or Absent) /10 cm ² or swab
		Yeast and Mould	NAL/MBL/SOP/024, Issue. 01, Issue Dated. 18.05.2015, Rev No:01, Dated:31.07.2017	≥1 cfu/cm ² ≥1 cfu /swab

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IV.	MOLECULAR ANALYSIS			
1.	GMO			
a.	Soya (Soya bean Meal, Soya Seed)	Qualitative Real Time PCR test for 35S promoter and NOS terminator	NAL/GMO/SOP/001, Issue No:01, Issue date 30.07.2018	(Qualitative (Present/Absent) LOD : 0.1 %
b.	Cotton & Cotton Seed	Qualitative Real Time PCR test for 35S promoter and NOS terminator	NAL/GMO/SOP/001, Issue No:01, Issue date 30.07.2018	(Qualitative (Present/Absent)) LOD : 0.1 %
c.	Maize and maize based products	Qualitative Real Time PCR test for 35S promoter and NOS terminator	NAL/GMO/SOP/001 Issue No:01, Issue date 30.07.2018	(Qualitative (Present/Absent) LOD : 0.1 %
d.	Rice (Organic Rice, Brown Rice & Basmati Rice)	Qualitative Real Time PCR test for 35S promoter and NOS terminator	NAL/GMO/SOP/001 Issue No:01, Issue date 30.07.2018	(Qualitative (Present/Absent) LOD : 0.1 %
e.	Spice (Chili, Turmeric, Pepper)	Qualitative Real Time PCR test for 35S promoter and NOS terminator	NAL/GMO/SOP/01 Issue No:01, Issue date 30.07.2018.	(Qualitative (Present/Absent) LOD : 0.1 %
	Identification Pathogen Detection By Real Time PCR			
	Food & Agri products - Herbs, Spices & Condiments, Fruit & Fruit Products, Vegetable Products , Milk & Dairy Products , Meat &	Detection of <i>Listeria monocytogens</i> by Real time PCR	NAL/GMO/SOP/002 Issue No:01, Issue date 30.07.2018	Present/Absent in 25 g
		Detection of <i>E. coli</i> by Real time PCR	NAL/GMO/SOP/002 Issue No:01, Issue date 30.07.2018	Present/Absent in 25 g
		Detection of Salmonella by Real Time PCR	NAL/GMO/SOP/002 Issue No:01,	Present/Absent in 25 g

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	Meat Products, Nut & Nut Products, Oilseeds & by-products, Starch & Starch Products, Animal Feed & Feed Stuffs.		Issue date 30.07.2018	
		Detection of <i>S. aureus</i> by Real Time PCR	NAL/GMO/SOP/002 Issue No:01, Issue date 30.07.2018	Present/Absent in 25 g
		Detection of Yeast by Real Time PCR	NAL/GMO/SOP/002 Issue No:01, Issue date 30.07.2018	Present/Absent in 25 g

***NOTE:** The Laboratory has demonstrated competence for the stated scope for **WATER**. This however does not fully cover 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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<u>CHEMICAL TESTING</u>				
I.	ATMOSPHERIC POLLUTION			
1.	Ambient Air	SPM (Suspended Particulate Matter)	IS 5182 (Part 4)	5.0 µg/m ³ to 1500 µg/m ³
		Sulphur Dioxide as SO ₂	IS 5182 (Part 2)	3.0 to 100 µg/m ³
		Nitrogen Dioxide as NO ₂	IS 5182 (Part 6)	9.0 to 100 µg/m ³
		RPM (PM ₁₀) Particulate matter (Size less than 10 µm)	IS 5182 (Part 23)	5.0 to 250 µg/m ³
		PM _{2.5} Particulate matter (Size less than 2.5 µm)	BS EN 14907	10.0 to 100 µg/m ³
		Ozone as O ₃	IS 5182 (Part 9)	10.0 to 200 µg/m ³
		Lead as Pb	BS EN 14902	0.05 to 100 µg/m ³
		Arsenic as As	BS EN 14902	2.0 to 15 ng/m ³
		Nickel as Ni	BS EN 14902	5.0 to 20 ng/m ³
		Carbon monoxide as CO	IS 5182 (Part 10) Clause. 6 (Electrochemical Method)	0.115 to 2.520 mg/m ³
		Ammonia as NH ₃	Methods of Air Sampling and Analysis (3rd Edition), 401 By James P Lodge, JR, Editor	20 to 500 µg/m ³
		Benzene as C ₆ H ₆	IS 5182 (Part 11) Clause. 4	0.1 to 30 µg/m ³
		Toluene	IS 5182 (Part 11) Clause. 4	0.1 to 500 µg/m ³
		Xylene	IS 5182 (Part 11) Clause. 4	0.1 to 500 µg/m ³
		Benzo (α) Pyrene	IS 5182 (Part 12)	0.04 to 25 µg/m ³
2.	Stack Emission	Particulate Matter	IS 11255 (Part 1)	5.0 to 5000 mg/Nm ³
		Sulphur Dioxide as SO ₂	IS 11255 (Part 2)	3.0 to 200 mg/Nm ³
		Oxides of Nitrogen (NO _x) as NO ₂	IS 11255 (Part 7)	9.0 to 300 mg/Nm ³
		Lead (in Particulate Matter)	BS EN 14902	0.1 to 50 mg/Nm ³

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		Carbon Monoxide as CO	NAL/CHL/SOP/STK005, Issue. 01&Date:30.10.2017	10.0 to 500 mg/Nm ³
		Velocity of flue Gas	IS 11255 (Part 3)	1.0 to 60 m/s
		Non Methyl hydro carbon(NMHC)	IS 5182 (Part 21)	1.0 to 50 mg/Nm ³
3.	Volatile Organic Compounds in Air	Benzene	ASTM D 3686, NAL/CHE/SOP/EN012 Issue. 01& Dated. 30.10.2017	0.1 to 10000 mg/m ³
		Bromobenzene		0.1 to 1000 mg/m ³
		Bromochloromethane		0.1 to 2000mg/m ³
		Bromodichloromethane		0.1 to 1000 mg/m ³
		Bromoform		0.1 to 1000 mg/m ³
		n-Butylbenzene		0.1 to 1000 mg/m ³
		sec-Butylbenzene		0.1 to 1000 mg/m ³
		tert-Butylbenzene		0.1 to 1000 mg/m ³
		Carbon tetrachloride		0.1 to 1000 mg/m ³
		Chlorobenzene		0.1 to 1000 mg/m ³
		Chloroform		0.1 to 1000 mg/m ³
		2-Chlorotoluene		0.1 to 1000 mg/m ³
		4-Chlorotoluene		0.1 to 1000 mg/m ³
		Dibromochloromethane		0.1 to 1000 mg/m ³
		1,2-Dibromo-3-chloropropane		0.1 to 1000 mg/m ³
		1,2-Dibromoethane		0.1 to 1000 mg/m ³
		Dibromomethane		0.1 to 1000 mg/m ³
		1,2-Dichlorobenzene		0.1 to 1000 mg/m ³
		1,3-Dichlorobenzene		0.1 to 1000 mg/m ³
		1,4-Dichlorobenzene		ASTM D 3686, NAL/CHE/SOP/EN012 Issue. 01& Dated. 30.10.2017
1,1-Dichloroethane	0.1 to 1000 mg/m ³			
1,2-Dichloroethane	0.1 to 1000 mg/m ³			
1,1-Dichloroethene	0.1 to 1000 mg/m ³			
cis-1,2-Dichloroethene	0.1 to 1000 mg/m ³			
trans-1,2-Dichloroethene	0.1 to 1000 mg/m ³			
1,2-Dichloropropane	0.1 to 1000 mg/m ³			
1,3-Dichloropropane	0.1 to 1000 mg/m ³			
	2,2-Dichloropropane	0.1 to 1000 mg/m ³		

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		1,1-Dichloropropene		0.1 to 1000 mg/m ³
		cis-1,3-Dichloropropene		0.1 to 1000 mg/m ³
		trans-1,3-Dichloropropene		0.1 to 1000 mg/m ³
		Ethylbenzene		0.1 to 1000 mg/m ³
		Hexachlorobutadiene		0.1 to 1000 mg/m ³
		Isopropylbenzene		0.1 to 1000 mg/m ³
		p-Isopropyltoluene		0.1 to 1000 mg/m ³
		Methylene chloride		0.1 to 1000 mg/m ³
		Naphthalene		0.1 to 1000 mg/m ³
		n-Propylbenzene		0.1 to 1000 mg/m ³
		Styrene		0.1 to 1000 mg/m ³
		1,1,1,2-Tetrachloroethane		0.1 to 1000 mg/m ³
		1,1,2,2-Tetrachloroethane		0.1 to 1000 mg/m ³
		Tetrachloroethene		0.1 to 1000 mg/m ³
		Toluene		0.1 to 1000 mg/m ³
		1,2,3-Trichlorobenzene		0.1 to 1000 mg/m ³
		1,2,4-Trichlorobenzene		0.1 to 1000 mg/m ³
		1,1,1-Trichloroethane		0.1 to 1000 mg/m ³
		1,1,2-Trichloroethane		0.1 to 1000 mg/m ³
		Trichloroethene		0.1 to 1000 mg/m ³
		1,2,3-Trichloropropane		0.1 to 1000 mg/m ³
		1,2,4-Trimethylbenzene	ASTM D 3686, NAL/CHE/SOP/EN012 Issue. 01& Dated. 30.10.2017	0.1 to 1000 mg/m ³
		1,3,5-Trimethylbenzene		0.1 to 1000 mg/m ³
		o-Xylene		0.1 to 1000 mg/m ³
		m-Xylene		0.1 to 1000 mg/m ³
		p-Xylene		0.1 to 1000 mg/m ³
4.	Ambient Noise Levels, Source Noise Levels			
	Noise Level Monitoring	Leq, Lmax, Lmin, Ld, Ln, Ldn, L10, L50, L90, SPL	IS 9989	30 to 130 dB(A)
		Insertion Loss (for Diesel Generator)	The Environment (Protection) Rules, 1986 – Schedule I	5 to 50 dB(A)

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5.	Illumination Monitoring	Illumination	IS 3646(Part-1)	0 to 2000 LUX
6.	Meteorological Parameters			
	Indoor Air Quality & Ventilation Monitoring	Air Movement	NAL/CHE/SOP/EN009, Issue No:01, Issue Date:30.10.2017	0.4 to 30 m/sec
		Temperature	NAL/CHE/SOP/EN003, Issue No:01, Issue Date:30.10.2017	15 °C to 70 °C
		Relative Humidity	NAL/CHE/SOP/EN004, Issue No:01, Issue Date:30.10.2017	20 % to 100 %
		Oxygen as O ₂	NAL/CHE/SOP/EN011, Issue No:01, Issue Date:30.10.2017	12-23 %
		Carbon Monoxide as CO	NIOSH 6604:1996, Issue 1, dated 15 May 1996 NAL/CHE/SOP/EN008, Issue No:01, Issue Date:30.10.2017	1.0 to 2000 mg/m ³
		Carbon dioxide CO ₂	NAL/CHE/SOP/EN010, Issue No:01, Issue Date:30.10.2017	1.0 to 2000 mg/m ³
		Formaldehyde	NIOSH 2541- Issue 2, dated 15 August 1994	0.025 to 4.6 mg/m ³
II.	POLLUTION & ENVIRONMENT			
1.	Waste Water (Effluents/Sewage)	pH	IS 3025 (Part 11), APHA 23 rd Edition ,4500 B Page 4-95	2 to 12
		Total Solids	IS 3025 (Part 15),APHA 23 rd Edition 2540 B Page 2-68	5.0 to 20000 mg/l

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Temperature	IS 3025 (Part 9), APHA 23 rd Edition 2550 B Page 2-74	20 to 60°C
		Total Dissolved Solids	IS 3025 (Part 16), APHA 23 rd Edition , 2540 C Page 2-69	5 to 20000 mg/l
		Total Suspended Solids	IS 3025 (Part 17), APHA 23 rd Edition ,2540 D Page 2-70	5.0 to 1000 mg/l
		Free residual chlorine	IS 3025 (Part 26) Clause. 3,4, APHA 23 rd Edition , 4500-CI-B Page 4-63	0.01 to 100mg/l
		Sulphate as SO ₄	IS 3025 (Part 24) Clause. 2,4, APHA 23 rd Edition,4500-E Page 4-199	5.0 to 2500 mg/l
		Chloride as Cl	IS 3025 (Part 32) Clause. 2, APHA 23 rd Edition,4500 B Page 4-75	1.0 to 2500 mg/l
		Sulphide as H ₂ S	IS 3025 (Part 29) Clause. 2,3, APHA 23 rd Edition, 4500 B Page 4-184	0.5 to 10 mg/l
		Oil & Grease	IS 3025 (Part 39) Clause. 5, APHA 23 rd Edition, 5520 B Page 5-42	2.0 to 200 mg/l
		Ammonical Nitrogen as NH ₃ -N	IS 3025 (Part 34) Clause. 2.2, 2.3, APHA 23 rd Edition, 4500 B Page 4-114	0.25 to 100 mg/l
		COD (Chemical Oxygen Demand)	IS 3025 (Part 58) APHA 23 rd Edition, 5220 B Page 5-18	4.0 to 25000 mg/l
		BOD at 27°C for 3 days (Biochemical Oxygen Demand)	IS 3025 (Part 44) APHA 23 rd Edition, 5210 B Page 5-160	2.5 to 5000 mg/l

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Residual Sodium Carbonate	IS 11624	By Calculation
		Hexavalent Chromium as Cr6+	IS 3025 (Part 52) APHA 23 rd Edition, 3500 B Page 3-71	0.05 to 25 mg/l
		Cyanide as CN	IS 3025 (Part 27) Clause. 2, APHA 23 rd Edition, 4500 C Page 4-44	0.1 to 1 mg/l
		Phenolic compounds as C ₆ H ₅ OH	IS 3025 (Part 43) Clause. 5,6, APHA 23 rd Edition, 5530 C Page 5-50	0.1 to 10 mg/l
		Free Ammonia as NH ₃	IS 3025 (Part 34) Clause. 2.2, 2.3, APHA 23 rd Edition, 4500 B Page 4-114	By Calculation
		Percent Sodium	IS 11624	By Calculation
		Boron as B	IS 13428 Annexure H, APHA 23 rd Edition, 4500 B Page 4-27	0.05 to 10 mg/l
		Total Kjeldahl Nitrogen as N	IS 3025 (Part 34) Clause. 5.3, APHA 23 rd Edition-, 4500 B Page 4-139	1.0 to 250 mg/l
		Reactive Silica as SiO ₂	IS 3025 (Part 35) Clause. 3, APHA 23 rd Edition, 4500 C Page 4-175	1.0 to 100 mg/l
		Fluoride as F	IS 3025 (Part 60), APHA 23 rd Edition, 4500 D Page 4-90	0.02 to 10 mg/l
		Copper as Cu	IS 3025 (Part 42) Clause. 6, APHA 23 rd Edition, 3111 B Page No:3-20	0.05 to 25 mg/l
		Nickel as Ni	IS 3025 (Part 54) APHA 23 rd Edition, 3111B Page No:3-20	0.05 to 25 mg/l

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		Zinc as Zn	IS 3025 (Part 49), APHA 23 rd Edition, 3111B Page No:3-20	0.01 to 25 mg/l
		Lead as Pb	IS 3025 (Part 47), APHA 23 rd Edition, 3111B Page No:3-20	0.05 to 50 mg/l
		Sodium as Na	IS 3025 (Part 45) Clause. 5, APHA 23 rd Edition, 3500 B Page 3-99	1.0 to 500 mg/l
		Potassium as K	IS 3025 (Part 45) Clause. 5, APHA 23 rd Edition, 3500 B Page 3-89	1.0 to 500 mg/l
		Sodium absorption ratio	IS 3025 (Part 45) Clause. 5	By Calculation
		Phosphate as PO ₄ /P ₂ O ₅	IS 3025 (Part 31) Clause. 4, APHA 23 rd Edition, 3500 D Page 4-163	0.05 to 100 mg/l
		Total Chromium as Cr	IS 3025(Part 52) Clause. 7, APHA 23 rd Edition 3111B Page No:3-20	0.05 to 40 mg/l
		Arsenic as As	IS 3025 (Part 37) Clause. 2, APHA 23 rd Edition,3114B Page No:3-36	0.001 to 10 mg/l
		Cadmium as Cd	IS 3025 (Part 41) Clause. 3, APHA 23 rd Edition, 3111B Page No:3-20	0.01 to 10 mg/l
		Iron as Fe	IS 3025 (Part 53) Clause. 6, 7, APHA 23 rd Edition 3111B Page No:3-20	0.05 to 25 mg/l
		Mercury as Hg	IS 3025 (Part 48),APHA 23 rd Edition,3112B Page No:3-25	0.001 to 10 mg/l

Vinay Kumar Tyagi
Convenor

Mallika Gope
Program Manager

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Selenium as Se	IS 3025 (Part 56), APHA 23 rd Edition, 3114B Page No:3-36	0.05 to 10 mg/l
		Manganese as Mn	IS 3025 (Part 59) APHA 23 rd Edition, 3111B Page No:3-20	0.05 to 25 mg/l
		Aluminium as Al	IS 3025 (Part 55), APHA 23 rd Edition, 3111D Page No:3-23	0.05 to 25 mg/l
2	Soil/Sediments			
		pH	IS 2720 (Part 26)	1 to 14
		Electrical Conductivity	IS 14767	5.0 to 2000 µS/cm
		Organic Matter	IS 2720 (Part 22)	By Calculation
		Available Sodium as Na	Laboratory Testing Procedure for Soil & Water Sample Analysis by DIRD,Pune-2009	1.0 to 1000 mg/kg
		Available Potassium as K		1.0 to 500 mg/kg
		Available Phosphorus		1 to 500 mg/kg
		Available Nitrogen as N		1 to 500 mg/kg
		Calcium as Ca		1.0 to 5000 mg/kg
		Magnesium as Mg		1 to 500 mg/kg
		Copper as Cu	SW- 846/USEPA 3050 B Rev. 2 & USEPA 7000B Rev. 2	1.0 to 20 mg/kg
		Cation Exchange Capacity	USEPA 9080-1 Rev. 0	1to 50 meq/100g
		Moisture	IS 2720 (Part 2)	0.1 to 90 g/100g
		Organic carbon	IS 2720(Part 22)	0.05 to 50 g/100g
		Barium	SW- 846/USEPA 3050 B Rev. 2 & USEPA 7000B Rev.2	0.5 to 200 mg/kg
		Iron as Fe	SW- 846/USEPA 3050 B Rev. 2 & USEPA 7000B Rev.2	1.0 to 1000 mg/kg
		Lead as Pb	SW- 846/USEPA 3050 B Rev. 2 & USEPA 7000B Rev.2	1.0 to 200 mg/kg

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		Total Chromium as Cr	SW- 846/USEPA 3050 B Rev. 2& USEPA 7000B Rev. 2	1.0 to 200 mg/kg
		Nickel as Ni	SW- 846/USEPA 3050 B Rev. 2 & USEPA 7000B Rev.2	1.0 to 200 mg/kg
		Zinc as Zn	SW- 846/USEPA 3050 B Rev. 2& USEPA 7000B Rev. 2	1.0 to 5000 mg/kg
3.	Wastes (Liquid/Slurry/Sludge/Solid/Semi-Solid)	Iron as Fe	SW- 846/USEPA 3050 B Rev. 2& USEPA 7000B Rev. 2	0.05 to 5 g/100 g
		Total Chromium as Cr	SW- 846/USEPA 3050 B Rev. 2& USEPA 7000B Rev. 2	1.0 to 200 mg/kg
		Nickel As Ni	SW- 846/USEPA 3050 B Rev. 2& USEPA 7000B Rev. 2	1.0 to 200 mg/kg
		Lead as Pb	SW- 846/USEPA 3050 B Rev. 2& USEPA 7000B Rev. 2	1.0 to 200 mg/kg
		Arsenic as As	USEPA 3050 B Rev. 2& USEPA 7062B	0.1 to 100 mg/kg
		Antimony as Sb	USEPA 3050 B Rev. 2& USEPA 7000B-1 Rev. 2	0.1 to 100 mg/kg
		Selenium as Se	USEPA 3050 B Rev. 2& USEPA 7740-1 Rev.0	0.1 to 100 mg/kg
		Ash content/Non Volatile matter	ASTM D 3174 , IS 10158	1.0 to 25 g/100 g
		Moisture	ASTM D 3173-11,IS 9235	1.0 to 60 g/100 g
		Volatile matter	ASTM D 3175-11,IS 10158	1.0 to 15 g/100 g
		Fixed Carbon	ASTM D 3172-13	1.0 to 25 g/100 g
		Gross Calorific Value	IS 10158	100 to 9000 k.Cal/kg

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		Nitrogen as N	NAL//CHL/SOP/SAS/008, Issue. 01 & Dated. 30.10.2017	1.0 to 500 mg/kg
		Phosphorus	IS 10158	1.0 to 500 mg/kg
		Potassium as K	Laboratory Testing Procedure for Soil & Water Sample Analysis by DIRD, Pune-2009	1.0 to 500 mg/kg
		Calcium as Ca		1.0 to 5000 mg/kg
		Magnesium as Mg		1.0 to 500 mg/kg
		Sodium as Na		1.0 to 500 mg/kg
		Copper as Cu		SW- 846/USEPA 3050 B Rev. 2& USEPA 7000B Rev. 2
		Cadmium as Cd	SW- 846/USEPA 3050 B Rev. 2& USEPA 7000B Rev. 2	0.5 to 50 mg/kg
		Zinc as Zn	USEPA 3050 B Rev. 2& USEPA 7000B Rev. 2	0.2 to 5000 mg/kg
		Mercury as Hg	USEPA 3050 B Rev. 2& USEPA 7000B Rev. 2	0.1 to 1000 mg/kg
		Hexavalent Chromium as Cr6+	IS 3025(Part 52)	0.05 to 1000 mg/kg
4.	VOC Compounds in sludge sample	Benzene	USEPA Method 5035A Revision 1	1.0 to 500 mg/kg
		Bromobenzene		1.0 to 500 mg/kg
		Bromochloromethane		1.0 to 500 mg/kg
		Bromodichloromethane		1.0 to 500 mg/kg
		Bromoform		1.0 to 500 mg/kg
		n-Butylbenzene		1.0 to 500 mg/kg
		sec-Butylbenzene		1.0 to 500 mg/kg
		tert-Butylbenzene	USEPA Method 5035A Revision 1	1.0 to 500 mg/kg
		Carbon tetrachloride		1.0 to 500 mg/kg
		Chlorobenzene		1.0 to 500 mg/kg
		Chloroform		1.0 to 500 mg/kg
		2-Chlorotoluene		1.0 to 500 mg/kg
		4-Chlorotoluene		1.0 to 500 mg/kg
			Dibromochloromethane	

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		1,2-Dibromo-3-Chloropropane		1.0 to 500 mg/kg
		1,2-Dibromoethane		1.0 to 500 mg/kg
		Dibromomethane		1.0 to 500 mg/kg
		1,2-Dichlorobenzene		1.0 to 500 mg/kg
		1,3-Dichlorobenzene		1.0 to 500 mg/kg
		1,4-Dichlorobenzene		1.0 to 500 mg/kg
		1,1-Dichloroethane		1.0 to 500 mg/kg
		1,2-Dichloroethane		1.0 to 500 mg/kg
		1,1-Dichloroethene		1.0 to 500 mg/kg
		cis-1,2-Dichloroethene		1.0 to 500 mg/kg
		trans-1,2-Dichloroethene		1.0 to 500 mg/kg
		1,2-Dichloropropane		1.0 to 500 mg/kg
		1,3-Dichloropropane		1.0 to 500 mg/kg
		2,2-Dichloropropane		1.0 to 500 mg/kg
		1,1-Dichloropropene		1.0 to 500 mg/kg
		Tetrachloroethene		1.0 to 500 mg/kg
		Toluene		1.0 to 500 mg/kg
		1,2,3-Trichlorobenzene		1.0 to 500 mg/kg
		1,2,4-Trichlorobenzene		1.0 to 500 mg/kg
		1,1,1-Trichloroethane		1.0 to 500 mg/kg
		1,1,2-Trichloroethane		1.0 to 500 mg/kg
		Trichloroethene		1.0 to 500 mg/kg
		1,2,3-Trichloropropane		1.0 to 500 mg/kg
		1,2,4-Trimethylbenzene		1.0 to 500 mg/kg
		1,3,5-Trimethylbenzene		1.0 to 500 mg/kg
		o-Xylene	USEPA Method 5035A Revision 1	1.0 to 500 mg/kg
		m-Xylene		1.0 to 500 mg/kg
		p-Xylene		1.0 to 500 mg/kg
5.	Municipal Solid wastes			1.0 to 500 mg/kg
		Iron as Fe	SW- 846/USEPA 3050 B Rev. 2& USEPA 7000B Rev. 2	0.05 to 5 g/100 g

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Total Chromium as Cr	SW- 846/USEPA 3050 B Rev. 2& USEPA 7000B Rev. 2	1.0 to 200 mg/kg
		Nickel As Ni	SW- 846/USEPA 3050 B Rev. 2 & USEPA 7000B Rev.2	1.0 to 200 mg/kg
		Lead as Pb	SW- 846/USEPA 3050 B Rev. 2 & USEPA 7000B Rev. 2	1.0 to 200 mg/kg
		Arsenic as As	USEPA 3050 B Rev. 2 & USEPA 7062B	0.1 to 100 mg/kg
		Antimony as Sb	USEPA 3050 B Rev. 2& USEPA 7000B-1 Rev. 2	0.1 to 100 mg/kg
		Selenium as Se	USEPA 3050 B Rev. 2& USEPA 7740-1 Rev.0	0.1 to 100 mg/kg
		Ash content/Non Volatile matter	ASTM D 3174,IS 10158	1.0 to 25 g/100 g
		Moisture	ASTM D 3173-11,IS 9235	1.0 to 60 g/100 g
		Volatile matter	ASTM D 3175-11,IS 10158	1.0 to 15 g/100 g
		Fixed Carbon	ASTM D 3172-13	1.0 to 25 g/100 g
		Gross Calorific Value	IS 10158	100 to 9000 k.Cal /kg
		Nitrogen as N	NAL//CHL/SOP/SAS/008, Issue. 01 & Dated. 30.10.2017	1.0 to 500 mg/kg
		Phosphorus	IS 10158	1.0 to 500 mg/kg
		Potassium as K	USEPA 3050 B Rev. 2& USEPA 7000B-1 Rev. 2	1.0 to 500 mg/kg
		Calcium as Ca	USEPA 3050 B Rev. 2& USEPA 7000B -1 Rev. 2	1.0 to 5000 mg/kg
		Magnesium as Mg	USEPA 3050 B Rev. 2 & USEPA 7000B -1 Rev. 2	1.0 to 500 mg/kg
		Sodium as Na	USEPA 3050 B Rev. 2 & USEPA 7000B Rev. 2	1.0 to 500 mg/kg

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Copper as Cu	SW- 846/USEPA 3050 B Rev. 2 & USEPA 7000B Rev.2	1.0 to 200 mg/kg
		Cadmium as Cd	SW- 846/USEPA 3050 B Rev. 2 & USEPA 7000B Rev.2	0.5 to 50 mg/kg
		Zinc as Zn	USEPA 3050 B Rev. 2& USEPA 7000B Rev. 2	0.2 to 5000 mg/kg
		Mercury as Hg	USEPA 3050 B Rev. 2& USEPA 7000B Rev. 2	0.1 to 1000 mg/kg
		Hexavalent Chromium as Cr ⁶⁺	IS 3025(Part 52)	0.05 to 1000 mg/kg
6.	Wastes [Sludge / Solids] [Toxicity Characteristic Leaching Procedure(TCLP)]	Arsenic as As	APHA 23rd Edition 3114-C Pg No:3-38/ USEPA 1311-1 (Extraction)	0.1 to 1000 mg/l
		Cadmium as Cd	APHA 23rd Edition 3111-B: Page. 3-18/USEPA 1311-1: (Extraction)	0.1 to 1000 mg/l
		Chromium as Cr	APHA 23rd Edition-3500 Cr-A/: USEPA 1311-1: (Extraction)	0.1 to 1000 mg/l
		Hexavalent Chromium as Cr ⁶⁺	APHA 23rd Edition-3500 Cr-B: Page. 3-69/ USEPA 1311-1 (Extraction)	0.1 to 1000 mg/l
		Nickel as Ni	APHA 23rd Edition -3111-B: Page. 3-18/USEPA 1311-1: (Extraction)	0.1 to 1000 mg/l
		Selenium as Se	APHA 23rd Edition-3114-C: Page. 3-38/USEPA 1311-1: (Extraction)	0.1 to 1000 mg/l
		Silver as Ag	APHA (23 rd Edition) 3111-B: Page. 3-18/USEPA 1311-1: (Extraction)	0.1 to 1000 mg/l

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Barium as Ba	APHA (23 rd Edition) 3111-D: Page. 3:20/USEPA 1311-1: (Extraction)	0.1 to 1000 mg/l
		Mercury as Hg	APHA (23 rd Edition)3112-B: Page. 3-23/USEPA 1311-1: (Extraction)	0.1 to 1000 mg/l
		Zinc as Zn	APHA (23 rd Edition) 3111-B: Page. 3-18/USEPA 1311-1: (Extraction)	0.1 to 1000 mg/l
		Copper as Cu	APHA (23 rd Edition) 3111-B: Page. 3-18/USEPA 1311-1: (Extraction)	0.1 to 1000 mg/l
		Lead as Pb	APHA (23 rd Edition) 3111-B: Page. 3-18/USEPA 1311-1: (Extraction)	0.1 to 1000 mg/l
III.	WATER			
1.	Surface Water, Ground Water, Drinking Water, Packaged Drinking Water, Natural Mineral Water, Process Water, Bore Well Water, Swimming Pool Water, Purified Water, Raw Water, Ro Processed Water, Product Water, Purified Water as per IP,USP,BP	Colour	IS 3025 (Part 4) APHA 23 rd Edition, 2120 B Page 2-6	1 to 75 Hazen
		Odour	IS 3025 (Part 5), APHA 23 rd Edition- 2150 C Page 2-20	Qualitative Agreeable / Disagreeable
		Taste	IS 3025 (Part 8) APHA 23 rd Edition, 2160 C Page 2-24	Qualitative Agreeable / Disagreeable
		Electrical Conductivity	IS 3025 (Part 14), APHA 23 rd Edition, 2510 B Page 2-58	1.0 to 10000 μ S/cm
		Turbidity	IS 3025 (Part 10) APHA 23 rd Edition, 2130 A Page 2-12	0.5 to 4000 NTU
		Total Hardness as CaCO ₃	IS 3025 (Part 21), APHA 23 rd Edition, 2340 C Page 2-48	1.0 to 1000 mg/l

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		Total Dissolved Solids	IS 3025 (Part 16) APHA 23 rd Edition, 2540 C Page 2-69	5.0 to 2000 mg/l
		pH	IS 3025(Part 11) Clause. 2, APHA 23 rd Edition, 4500 B Page 4-95	2 to 12
		Nitrate as NO ₃	IS 3025(Part 34) Clause. 3.3, APHA 23 rd Edition, 4500 C Page 4-128	1.0 to 55.0 mg/l
		Nitrite as NO ₂	IS 3025 (Part 34) Clause. 4, APHA 23 rd Edition, 4500 B Page 4-124	0.01 to 10 mg/l
		Fluoride as F	IS 3025 (Part 60), APHA 23 rd Edition, 4500 D Page 4-90	0.02 to 10.0mg/l
		Ammonia (as Total Ammonia-N)	IS 3025 (Part 34), APHA 23 rd Edition, 4500 B Page 4-114	0.25 to 2.5.mg/l
		Chloride as Cl	IS 3025 (Part 32) Clause. 2, APHA 23 rd Edition-2017, 4500 B Page 4-75	1.0 to 1000 mg/l
		Sulphate as SO ₄	IS 3025 (Part 24) Clause. 2, 4, APHA 23 rd Edition, 4500 E Page 4-199	5.0 to 400 mg/l
		Total Alkalinity as CaCO ₃	IS 3025(Part 23) APHA 23 rd Edition, 2320 B Page 2-37	1.0 to 500 mg/l
		Calcium as Ca	IS 3025 (Part 40) Clause. 5, APHA 23 rd Edition 3500 B Page 3-69	1.0 to 1000 mg/l

Vinay Kumar Tyagi
Convenor

Mallika Gope
Program Manager

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		Magnesium as Mg	IS 3025 (Part 46) Clause. 6, APHA 23 rd Edition, 3500 B Page 3-86	0.5 to 1000 mg/l
		Sodium as Na	IS 3025 (Part 45) Clause. 5, APHA 23 rd Edition- 3500 B Page 3-99	1.0 to 1000 mg/l
		Residual Free Chlorine	IS 3025 (Part 26) Clause. 3,4, APHA 23 rd Edition , 4500 B Page 4-63	0.01 to 5 mg/l
		Mineral Oil	IS 3025 (Part 39) Clause. 6, APHA 23 rd Edition, 5520 C Page-5-44	0.01 to 10 mg/l
		Anionic surface Active agents as MBAS	IS 13428 Annexure K, APHA 23 rd Edition ,5540 C Page 5-55	0.1 to 1.0 mg/l
		Sulphide as H ₂ S	IS 3025 (Part 29) Clause. 2,3, APHA 23 rd Edition , 4500 D Page 4-184	0.05 to 25 mg/l
		Borates as B	IS 13428 Annexure H, APHA 23 rd Edition, 4500 B Page 4-27	0.05 to 25 mg/l
		Chloramines as Cl ₂	IS 3025 (Part 26) APHA 23 rd Edition , 4500 B Page 4-63	0.1 to 10.0 mg/l
		Bromates as BrO ₃	ISO 15061	0.005 to 1 mg/l
IV.	RESIDUES IN WATER			
1.	Pesticides	2, 4 DDT (O,P DDT)	USEPA 525.2, Rev 2.0,	0.01 to 0.1 µg/L
		4, 4 DDT (P,P DDT)	USEPA 8141A, Rev. 1,	0.01 to 0.1 µg/L
		2, 4 DDE (O,P DDE)	USEPA 515.1, Rev. 4.1,	0.01 to 0.1 µg/L

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		4, 4 DDE (P,P DDE)	USEPA 532 ,Rev. 1,	0.01 to 0.1 µg/L
		2, 4 DDD (O,P DDD)	USEPA 507, Rev. 2.1,	0.01 to 0.1µg/L
		4,4 DDD (P,P DDD)	AOAC (20 th Edition)	0.01 to 0.1µg/L
		γ - HCH (Lindane)	990.06:	0.01 to 0.1µg/L
		α - HCH	Chapter 10, Page. 27	0.01 to 0.1µg/L
		β - HCH	NAL/INS/SOP/GC001	0.01 to 0.1µg/L
		δ - HCH	Issue:01 date:01.11.2017	0.01 to 0.1µg/L
		Endosulfan α		0.01 to 0.1µg/L
		Endosulfan β		0.01 to 0.1µg/L
		Endosulfan sulphate		0.01 to 0.1µg/L
		Monocrotophos		0.01 to 0.1µg/L
		Ethion		0.01 to 0.1µg/L
		Chlorpyrifos		0.01 to 0.1µg/L
		Phorate		0.01 to 0.1µg/L
		Butachlor		0.01 to 0.1µg/L
		Phorate sulphone		0.01 to 0.1µg/L
		Alachlor		0.01 to 0.1µg/L
		Atrazine		0.01 to 0.1µg/L
		Methyl parathion		0.01 to 0.1µg/L
		Methyl Paraoxon		0.01 to 0.1µg/L
		Malathion		0.01 to 0.1µg/L
		Malaoxon		0.01 to 0.1µg/L
		Aldrin		0.01 to 0.1µg/L
		Dieldrin		0.01 to 0.1µg/L
		Phorate sulphoxide		0.01 to 100 µg/L
		Isoproturon		0.01 to 100 µg/L
		2, 4 – D		0.01 to 100 µg/L
		Acrylamide	USEPA 8032A-1,Rev. 1	0.1 to 100 µg/L
		Epichlorohydrin	USEPA 8260B-1,Rev. 2	0.1 to 100 µg/L
		1,2-dichloroethane	USEPA 5030C-2,Rev. 3	0.1 to 100 µg/L
		Trichloroethene	USEPA 5030C-2,Rev. 3	0.1 to 100 µg/L
		Tetra chloroethane	USEPA 5030C-2,Rev. 3	0.1 to 100 µg/L
		Bromoform	USEPA 5030C-2,Rev. 3	0.1 to 100 µg/L
		Dibromochloromethane	USEPA 5030C-2,Rev. 3	0.1 to 100 µg/L

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		Bromodichloromethane	USEPA 5030C-2, Rev. 3	0.1 to 100 µg/L
		Chloroform	USEPA 5030C-2, Rev. 3	0.1 to 100 µg/L
		Vinyl chloride	USEPA 5030C-2, Rev. 3	0.1 to 100 µg/L
		Benzene	USEPA 5030C-2, Rev. 3	0.1 to 100 µg/L
	Trace Metals Elements	Copper as Cu	IS 3025 (Part 42) Clause. 6/ APHA 23 rd Edition 3111B Page No:3-20/ USEPA 200.8 Rev.5.4	0.01 to 5.0 mg/L
		Iron as Fe	IS 3025 (Part 53) Clause. 6 APHA 23 rd Edition 3111B Page No:3-20	0.05 to 15.0 mg/L
		Manganese as Mn	IS 3025 (Part 59), APHA 23 rd Edition 3111B Page No:3-20	0.05 to 15.0 mg/L
		Selenium as Se	IS 3025 (Part 56) IS 15303 Clause. 7, APHA 23 rd Edition 3114 Page No:3-36	0.001 to 1 mg/L
		Antimony as Sb	IS 13428, IS 15303 Annexure G	0.001 to 1.5 mg/L
		Barium as Ba	IS 13428 Annexure F/APHA (23 rd Edition) 3125B: USEPA 200.8 Rev. 5.4 IS 15302	0.05 to 10.0 mg/L
		Mercury as Hg	IS 3025 (Part 48)	0.0005 to 1 mg/L
		Cadmium as Cd	IS 3025 (Part 41), APHA 23 rd Edition 3111B Page No:3-20	0.001 to 5 mg/L
		Arsenic as As	IS 3025 (Part 37), APHA 23 rd Edition 3114 Page No:3-36	0.001 to 1 mg/L
		Cyanide as CN	IS 3025 (Part 27)	0.001 to 5 mg/L
		Lead as Pb	IS 3025 (Part 47) Clause.	0.005 to 5 mg/L

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			7,APHA 23 rd Edition 3111B Page No:3-20	
		Chromium as Cr	IS 13428 Annexure J, APHA 23 rd Edition 3111B Page No:3-20	0.01 to 5 mg/L
		Nickel as Ni	IS 13428 Annexure L, APHA 23 rd Edition 3111B Page No:3-20	0.01 to 2.0 mg/L
		Zinc as Zn	IS 3025 (Part 49),APHA 23 rd Edition 3111B Page No:3-20	0.01 to 10 mg/L
		Silver as Ag	IS 13428 Annexure J	0.005 to 1 mg/L
		Aluminium as Al	IS 3025 (Part 55) Clause. 5,6/ IS 15302, APHA 23 rd Edition 3111D Page No:3-23	0.01 to 1 mg/L
		Molybdenum as Mo	IS 3025 (Part 2)	0.02 to 1 mg/L
	Phenols			
		Phenolic Compounds	IS 3025(Part 43) Clause. 5,6	0.001 to 1 mg/L
	Poly Aromatic Hydrocarbons (PAHs)	Acenaphthene	APHA (23 rd Edition) 6440	0.01 to 100 µg/L
		Acenaphthylene	NAL/INS/SOP/LC032	0.01 to 100 µg/L
		Anthracene	Issue:01 date: 03.11.2017	0.01 to 100 µg/L
		Benz (a) anthracene		0.01 to 100 µg/L
		Benzo (b) fluranthene		0.01 to 100 µg/L
		Benzo (k) fluranthene		0.01 to 100 µg/L
		Benzo (g,h,i) perylene		0.01 to 100 µg/L
		Benzo (a) pyrene		0.01 to 100 µg/L
		Chrysene		0.01 to 100 µg/L
		Dibenz (a,h) anthracene		0.01 to 100 µg/L
	Fluoranthene		0.01 to 100 µg/L	
	Fluorene		0.01 to 100 µg/L	
	Indeno (1,2,3-cd) pyrene		0.01 to 100 µg/L	

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		Naphthalene		0.01 to 100 µg/L
		Phenanthrene		0.01 to 100 µg/L
		Pyrene		0.01 to 100 µg/L
	Poly Chlorinated Biphenyls (PCBs)	2,4,4'-Trichlorobiphenyl (PCB No 28)	IS 13428 Annexure M NAL/INS/SOP/GC002 Issue:01date:01.11.2017, APHA 23 rd Edition 2017-6431	0.01 to 0.1 µg/L
		2,2',3,4,4',5'-Hexachlorobiphenyl (PCB 138)		0.01 to 0.1 µg/L
		2,6'-Dichlorobiphenyl (PCB 10)		0.01 to 0.1 µg/L
		2,2',3,4,4',5,5'-Heptachlorobiphenyl- (PCB 180)		0.01 to 0.1 µg/L
		2,2',4,4',5,5'-Hexachlorobiphenyl- (PCB 153)		0.01 to 0.1 µg/L
		2,2',5,5'-Tetrachlorobiphenyl- (PCB 52)		0.01 to 0.1 µg/L
V.	FOOD & AGRICULTURAL PRODUCTS			
1.	Fruit & fruit products			
	Including Raw/Frozen/Dried/ Cooked/Canned/Processed	Moisture	NAL/CHL/SOP/F001 Issue No:01, Issue Date 06.03.2017	0.5 to 95.0 g/100 g
		Total Solids	AOAC (20 th Edition) 920.151 Page. 6, Chapter 37	1 to 99 g/100 g
		Total Soluble Solids	IS 13815 ,IS 5861	5 to 85 g/100 g
		Total Ash	AOAC (20 th Edition) 940.26 Page. 7, Chapter 37	0.1 to 5.0 g/100 g
		pH	AOAC (20 th Edition)	1.0 to 14.0

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			981.12: Page. 2, Chapter 42	
		Salinity as NaCl	IS 2860, IS 5719	0.1 to 20 g/100g
		Total Protein	IS 7219: 1973 (RA 2010)	0.1 to 30 g/100g
		Total Fat	NAL/CHL/SOP/F014, Issue No:01, Issue Date 06.03.2017	0.1 to 10g/100g
		Crude Fibre	NAL/CHL/SOP/F015, Issue No:01, Issue Date 06.03.2017	0.1 to 10g/100g
		Calcium as Ca	IS 5949, IS 2860	0.1 to 5 g/100g
		Mineral Impurities	IS 13816	0.05 to 10 g/100g
		Acid insoluble ash	IS 13846	0.01 to 3 g/100g
		Magnesium as Mg	IS 5949	10 to 2000 mg/kg
		Sodium as Na	AOAC (20 th Edition) 966.16 Page. 8, Chapter 37, IS 9497	10 to 2000 mg/kg
		Brix	IS 2860	4° to 85°
		Sugar	AOAC (20 th Edition) 925.35 Page. 18 Chapter 37	1 to 90g/100g
		Alcohol as Ethanol	AOAC (20 th Edition) 920.150 Page. 4, Chapter 37, IS 15096	0.01 to 10g/100g
		Volatile Acidity	IS 3752	0.1 to 10g/100g
		Starch	AOAC (20 th Edition) 925.38 Page. 18, Chapter 37	Qualitative
		Sulphur dioxide	AOAC (20 th Edition) 990.28 Page. 38, Chapter 47	10 to 5000 mg/kg
		Rodent Contamination	IS 6261	Qualitative
		Added Coloring Matter	NAL/CHL/SOP/F002 Issue No:01, Issue Date 06.03.2017	Qualitative
		Added Wax Coating	NAL/CHL/SOP/F026, Issue No:01, Issue Date 06.03.2017	Qualitative

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Inorganic Bromide	AOAC (20 th Edition) 956.03 Page. 20, Chapter 32, IS 14626	2.5 to 200 mg/kg
		Benzoic acid	AOAC (20 th Edition) 994.11: Page. 24, Chapter 37, NAL/INS/SOP/LC012 Issue No:01, Issue Date:06.03.2017	10 to 600 mg/kg
		Fruit Content	NAL/CHL/SOP/F003 Issue No:01, Issue Date 06.03.2017	1 to 80 g/100gm
		Potassium	AOAC (20 th Edition) 965.30 Page. 7, Chapter 37, IS 9497	10 to 2000 mg/kg
		Rotting	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Patulin	AOAC (20 th Edition) 995.10 Page. 79, Chapter 49, NAL/INS/SOP/LC004, Issue No:01, Issue Date:06.03.2018	10 to 500 µg/kg
		Sorbic Acid	IS 12014 (Part 3) NAL/INS/SOP/LC013, Issue No:01, Issue Date:06.03.2018	5 to 360 mg/l
		Drained Weight	AOAC (20 th Edition) 953.15 Page. 2, Chapter 37, IS 2860	1 to 99 g/100g
		Titration acidity	IS 2860 AOAC (20 th Edition) 37.1.37/942.15/p.10	0.05 to 12.5 g/100g
		Reducing sugar	NAL/CHL/SOP/F018, Issue No:01, Issue Date 06.03.2017	1 to 80 g/100g

Vinay Kumar Tyagi
Convenor

Mallika Gope
Program Manager

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Sand	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Grit	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Insect	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Fungal infection	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Extraneous matter	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Mineral acid	NAL/CHL/SOP/F018, Issue. Issue No:01, Issue Date 06.03.2017	Qualitative
		Living and dead insects	IS 6261	Qualitative
2.	Vegetable & Vegetable Products			
a	Including Raw/ Frozen/ Dried/ Cooked/ Canned/ Processed	Moisture	NAL/CHL/SOP/F001 Issue No:01, Issue Date 06.03.2017	0.5 to 95.0 g/100 g
		Total Solids	AOAC (20 th Edition) 920.151 Page. 6, Chapter 37	1 to 99 g/100 g
		Total Soluble Solids	IS 13815	5 to 85 g/100 g
		Total Ash	AOAC (20 th Edition) 940.26: Page. 7, Chapter 37	0.1 to 5.0 g/100 g
		pH	AOAC (20 th Edition) 981.12: Page. 2, Chapter 42	1.0 to 14.0

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		Salinity as NaCl	IS 2860	0.1 to 20 g/100g
		Total Protein	IS 7219	0.1 to 30 g/100g
		Total Fat	NAL/CHL/SOP/F014, Issue No:01, Issue Date 06.03.2017	0.1 to 10 g/100g
		Crude Fibre	NAL/CHL/SOP/F015 Issue Issue No:01, Issue Date 06.03.2017	0.1 to 10 g/100g
		Calcium as Ca	IS 5949, IS 2860	0.1 to 5 g/100g
		Mineral Impurities	IS 13816	0.05 to 10 g/100g
		Acid insoluble ash	IS 13846	0.01 to 3 g/100g
		Magnesium as Mg	IS 5949	10 to 2000 mg/kg
		Sodium as Na	AOAC (20 th Edition) 966.16 Page. 8, Chapter 37	10 to 2000 mg/kg
		Brix	IS 2860	4° to 85°
		Sugar	AOAC (20 th Edition) 925.35 Page. 18, Chapter 37	1 to 90 g/100g
		Volatile Acidity	IS 3752	0.1 to 10 g/100g
		Starch	AOAC (20 th Edition) 925.38: Page. 18, Chapter 37	Qualitative
		Sulphur dioxide	AOAC (20 th Edition) 990.28 Page. 38, Chapter 47	10 to 5000 mg/kg
		Rodent Contamination	IS 6261	Qualitative
		Added Coloring Matter	NAL/CHL/SOP/F002 Issue No:01, Issue Date 06.03.2017	Qualitative
		Added Wax Coating	NAL/CHL/SOP/F026, Issue No:01, Issue Date 06.03.2017	Qualitative
		Inorganic Bromide	AOAC (20 th Edition) 956.03 Page. 20, Chapter 32 IS 14626,NAL/CHL/SOP/28, Issue No:01, Issue Date 06.03.2017	2.5 to 200 mg/kg

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		Potassium	AOAC (20 th Edition) 965.30 Page. 7, Chapter 37	10 to 2000 mg/kg
		Rotting	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Drained Weight	AOAC (20 th Edition) Page. 2, Chapter 37 953.15, IS 2860	1 to 99 g/100g
		Titration acidity	IS 2860, AOAC (20 th Edition) 37.1.37/942.15/P.10,	0.05 to 12.5 g/100g
		Reducing sugar	NAL/CHL/SOP/018, Issue No:01, Issue Date 06.03.2017	1 to 80 g/100g
		Sand	NAL/CHL/SOP /F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Grit	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Insect	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Fungal infection	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Extraneous matter	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Mineral acid	NAL/CHL/SOP/F018, Issue. 01, Issue No:01, Issue Date 06.03.2017	Qualitative
		Living and dead insects	IS 6261	Qualitative

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3	Cereals, Pulses & Cereal Products			
	Wheat Atta, Fortified Atta, Protein Rich Atta, Maida, Fortified Maida, Protein Rich Maida, Rawa, Suji, Besant, Pearl Barley, Whole Meal Barley, Corn Flour, Custard Food Grains Wheat, Maize, Jawa, Rice, Millet, Ragi, Rye, Masur Whole, Moong Whole, Chana Whole, Dal Moong, Urd, Arhar, Chana, Cornflour, Cornflakes, Macroni Products, Custard Powder, Rolled Oats, Solvent Extracted Flours, Starchy Foods, Food Grains (Maltd & Malt Based Foods Processed Cereal Based Complimentary Food	Moisture	IS 4333 (Part 2)	1.0 to 25 g/100 g
		Total Ash	IS 1155	0.05 to 10 g/100 g
		Ash insoluble in dil. HCl	IS 1155	0.01 to 5.0 g/100 g
		Gluten	IS 1155	1.0 to 20 g/100 g
		Alcoholic Acidity	IS 1009	0.02 to 2.0g/100g
		Crude fibre	IS 1155	0.1 to 25.0 g/100 g
		Calcium as CaCO ₃	AOAC (20 th Edition) 944.03: Page. 4, Chapter 32	1 to 10000 mg/kg
		Total Protein	IS 7219, IS 5719	1 to 95 g/100 g
		Total Fat	AOAC (20 th Edition) 922.06: Page. 5, Chapter 32	1 to 25 g/100 g
		Granularity	IS 1155	0.05 to 10 g/100 g
		Foreign Matter/ Extraneous matter	IS 4333 (Part 1)	0.01 to 10.0 g/100 g
		Damaged grains	IS 4333 (Part 1)	0.01 to 40 g/100 g
		Weevilled grains	IS 4333 (Part 1)	0.01 to 50 g/100 g
		Uric Acid	IS 4333 (Part 5) NAL/INS/SOP/LC026 Issue No:01, Issue Date 06.03.2017	1 to 100 mg/kg
		Argemone Seeds	IS 2323	Qualitative
		Khesari Dal	IS 2400	Qualitative
	Mineral Matter	NAL/CHL/SOP/F005 Issue No:01, Issue Date 06.03.2017	0.01 to 10 g/100 g	
	Organic matter	NAL/CHL/SOP/F005 Issue No:01, Issue Date 06.03.2017	0.01 to 10 g/100 g	
	Insect damaged grains	IS 4333 (Part 1)	0 to 25 g/100 g	

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		Other Edible grains	IS 4333 (Part 1)	0 to 25 g/100 g
		Insect	IS 6261: 1971	Qualitative
		Rodent Hair & Excreta	AOAC (20 th Edition) 941.16:Page. 22 Chapter 16	Qualitative
		Inorganic Bromide	AOAC (20 th Edition) 956.03: Page. 20, Chapter 32, IS 14626	5 to 1000 mg/kg
		Hydrocyanic Acid as HCN	AOAC (20 th Edition) 915.03: Page.126, Chapter-49	1 to 1000 mg/kg
		Hydrogen phosphide as AIP	IS 6438	0 to 1000 mg/kg
		Bulk Density	IS 1797	0.16 to 2 g/cm ³
		Added Coloring Matter	NAL/CHL/SOP/F002 Issue No:01, Issue Date 06.03.2017	Qualitative
		Wet Gluten	IS 8162	10 to 50 g/100 g
		Sedimentation Index	IS 13864	1 to 80 ml
		Deoxynivalenol (DON)	NAL/INS/SOP/LC005 Issue No: 01, Issue Date. 03.11.2017, AOAC 20 th Edition , 986.18 Chapter 49, Page No:55	10 to 200 µg/kg
		Mould	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Musty odour	IS 1656	Qualitative
		Rancidity	NAL/CHL/SOP/F025 Issue No:01 Issue Date 06.03.2017	Qualitative
		Dirt	NAL/CHL/SOP /F004	Qualitative

Vinay Kumar Tyagi
Convenor

Mallika Gope
Program Manager

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			Issue No:01, Issue Date 06.03.2017	
		Potassium Bromate	AOAC (20 th Edition) 956.03: Page. 20, Chapter 32	1 to 100 mg/kg
		Fungus	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Larva	NAL/CHL/SOP /F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Sulphur dioxide	AOAC (20 th Edition) 990.28: Page. 38 Chapter 47	10 to 5000 mg/kg
		Total ash excluding salt	IS 1158	0.01 to 20 g/100g
		Solubility	IS 1806	Qualitative
		Free Gossypol	NAL/CHL/SOP/F019, Issue No:01, Issue Date 06.03.2017	0.01 to 1 g/100g
		Total Gossypol	NAL/CHL/SOP/F019, Issue No:01, Issue Date 06.03.2017	0.01 to 2 g/100g
4.	Nuts & Nut products			
	Raw And Processed- (Including Peanut And Peanut Products/ Pistachios/ Almonds/ Walnuts/ Paprika/ Coconut & Coconut Products/ Cashew Nuts, Dates)	Moisture	AOAC (20 th Edition) 925.40: Page. 01, Chapter 40	1 to 25.0 g/100g
		Crude Protein	AOAC (20 th Edition) 950.48: Page. 01, Chapter 40 IS 5719; IS 7219	1 to 30 g/100g
		Crude Fat	AOAC (20 th Edition) 948.22: Page. 01, Chapter 40	0.1 to 75 g/100g

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		Crude Fibre	NAL/CHL/SOP /F015, Issue. 01 & Dated. 06.03.2017	0.1 to 15 g/100g
		Sulphur dioxide	AOAC (20 th Edition) 990.28: Page. 38, Chapter 47	10 to 500 mg/kg
		Extraneous matter	IS 4333 (Part 1)	0.1 to 10 g/100g
		Insects Fragments	IS 6261	Qualitative
		Rodent Hair& Excreta	AOAC (20 th Edition) 941.16: Page. 22, Chapter 16	Qualitative
		Acidity of Extracted Fat as Oleic Acid	IS 15271,IS 12711	0.1 to 5 g/100 g
		Sodium	AOAC (20 th Edition) 956.01 Page. 13,Chapter 3.0 IS 9497	0.01 to 1 g/100g
		Potassium	AOAC (20 th Edition) 956.01 Page. 13,Chapter 3.0 IS 9497	10.0 to 5000 mg/100g
		Magnesium	AOAC (20 th Edition) 920.09: Page. 11, Chapter 3.0 IS 5949	0.02 to 5 g/100g
		Calcium	AOAC (20 th Edition) 910.01 Page. 7, Chapter 3.0, IS 5949	0.02 to 5 g/100g
		Ash	IS 966,AOAC (20 th Edition) 950.49, Page. 2, Chapter 40,	0.1 to 5.0 g/100g
		Sodium chloride as NaCl	AOAC (20 th Edition) 950.52: Page. 2,Chapter 40	0.1 to 20 g/100g
		Fungal infection	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative

Vinay Kumar Tyagi
Convenor

Mallika Gope
Program Manager

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Stones	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Dirt clay	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Damaged kernel /Slightly damaged kernel	IS 4333 (Part 1)	0.01 to 10 g/100g
		Mineral oil	IS 15642(Part-2)	Qualitative
		Damaged raisins	NAL/CHL/SOP/F033 Issue No:01, Issue Date 06.03.2017	0.01 to 10 g/100g
		Blemished / Damaged units	NAL/CHL/SOP/F033 Issue No:01, Issue Date 06.03.2017	0.01 to 10 g/100g
		Mustiness	NAL/CHL/SOP/F023 Issue No:01, Issue Date 06.03.2017	Qualitative
		Rancidity	NAL/CHL/SOP/F025 Issue No:01, Issue Date 06.03.2017	Qualitative
		Hydrocyanic Acid as HCN/ Hydrogen Cyanide	AOAC (20 th Edition) 915.03: Page. 126,Chapter 49	1 to 1000 mg/kg
		Inorganic Bromide	NAL/CHL/SOP/F028, Issue No:01, Issue Date 06.03.2017	2.5 to 1000 mg/kg
		Hydrogen Phosphide as AIP	NAL/CHL/SOP/F029, Issue No:01, Issue Date 06.03.2017	0.01 to 1000 mg/kg
5.	Herbs, Spices & Condiments			
	Whole & Ground-Caraway,	Extraneous Matter	IS 1797	0.01 to 20 g/100g
		Non volatile Ether extract	IS 1797	1 to 40 g/100g

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	Cardamom, Chillies & Capsicum, Cinnamon, Cassia, Cloves, Coriander, Cumin, Fennel, Fenugreek, Ginger, Mace, Mustard, Nutmeg, Pepper Black, Poppy, Saffron, Turmeric, Curry Powder, Mixed Powder, Aniseed, Ajwain, Dried Mango Slice, Dried Mango Powder, Pepper White, Garlic, Celery, Dehydrated Onion, Asafoetida, Tamarind, Tamarind Concentrate, Garam Masala, Large Cardamom, Amchur, Raw Mango Mangifera Indica Powder, Dehydrated Garlic, Ajowan, Celery Seeds	Rodent Hair & Excreta	AOAC (20 th Edition) 941.16 Page. 22, Chapter 16	Qualitative
		Damaged/Discolored unit	IS 4333 (Part 1), IS 3579	0.01 to 20 g/100g
		Tendrils	IS 4404	0.01 to 10.0 g/100g
		Mother Cloves	IS 4404	0.01 to 10.0 g/100g
		Khokar cloves	IS 4404	0.1 to 10 g/100g
		Headless Cloves	IS 4404	0.01 to 20 g/100g
		Insect Fragment	IS 4333 (Part 1)	Qualitative
		Insect damaged Cloves	IS 4333 (Part 1)	0 to 5 g/100g
		Damaged/discolored Cloves	IS 4333 (Part 1)	0.01 to 20 g/100g
		Insect damaged matter	IS 4333 (Part 1)	0.01 to 10 g/100g
		Live & Dead insects fragments	IS 4333 (Part 1)	Qualitative
		Nutmeg in Mace	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	0.01 to 5 g/100g
		Inorganic Bromide	IS 14626, NAL/CHL/SOP/F028 Issue No:01, Issue Date 06.03.2017	2.5 to 200 mg/kg
		Empty/Malformed Capsules	IS 4333 (Part 1)	0.01 to 50 g/100g
		Immature and Shriveled Capsules	IS 4333 (Part 1)	0.01 to 20 g/100g
		Broken Tendrils	IS 4333 (Part 1)	0.01 to 20 g/100g
		Moisture	IS 1797	0.1 to 50 g/100g
		Total ash	IS 1797	0.1 to 30 g/100g
		Split fruits	IS 4333 (Part 1)	0.01 to 5 g/100g
		Ash insoluble in dilute HCl	IS 1797	0.01 to 5 g/100g
		Volatile oil	IS 1797	1 to 25 ml/100g
		Mineral oil	IS 548 (Part 2)	Qualitative
		Crude Fibre	IS 1797	0.1 to 30 g/100g
	Cold water soluble extract	IS 1797	0.01 to 20 g/100g	

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		Calcium as calcium oxide	IS 1797	0.1 to 20 g/100g
		Water soluble ash	IS 1797	0.5 to 5 g/100g
		Alcohol Soluble Extract	IS 1797	1 to 25 g/100g
		Starch	IS 4706 (Part 2)	1 to 60 g/100g
		Bulk density	IS 1797	0.3 to 2.0 g/liter
		Piperine Content in Pepper	AOAC (20 th Edition) 987.07: Page. 6 Chapter 43	1 to 10 g/100g
		Lead Chromate in Turmeric	IS 3576	Qualitative
		Curcuminoid Content in Turmeric	IS 10925	1.0 to 10
		Peroxidase test	NAL/CHL/SOP/F006, Issue No:01, Issue Date 06.03.2017	Qualitative
		Allyl iso thiocyanate	NAL/CHL/SOP/F034, Issue No:01, Issue Date 06.03.2017	1.0 to 25 g/100g
		p-hydroxyl benzyl iso thiocyanate	NAL/CHL/SOP/F034, Issue No:01, Issue Date 06.03.2017	2.5 to 50 g/100g
		Argemone seed	IS 2323	Qualitative
		Kokum Seed Content	IS 13644	0.25 to 10.0 g/100g
		Salt as NaCl	IS 1797	1 to 50 g/100g
		Total Soluble Solids	IS 5955	1 to 50 g/100g
		Total insoluble Pulp	IS 5955	1 to 50 g/100g
		Total Reducing Sugar	IS 5955	1 to 70 g/100g
		Added coloring Matter	NAL/CHL/SOP/F002 Issue No:01, Issue Date 06.03.2017	Qualitative
		Turmeric in Chilli and Coriander	NAL/CHL/SOP/F007 Issue No:01, Issue Date 06.03.2017	Qualitative

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Papaya Seeds in Black Pepper	NAL/CHL/SOP/F008 Issue No:01, Issue Date 06.03.2017	Qualitative
		Protein	IS 7219, IS 5719	1 to 50 g/100g
		Mould	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Organic matter	NAL/CHL/SOP/F005 Issue No:01, Issue Date 06.03.2017	Qualitative
		Inorganic matter	NAL/CHL/SOP/F005 Issue No:01, Issue Date 06.03.2017	Qualitative
		Extraneous flavor	NAL/CHL/SOP/F023, Issue No:01, Issue Date 06.03.2017	Qualitative
		Mustiness	NAL/CHL/SOP/F023, Issue No:01, Issue Date 06.03.2017	Qualitative
		Light seeds/Brown/Red seeds	IS 13446	0.01to 10g/100g
		Odour	IS 13446	Qualitative
		Rancidity	NAL/CHL/SOP/F025, Issue No:01, Issue Date 06.03.2017	Qualitative
		Sulphurdioxide	AOAC (20 th Edition) 990.28: Chap.47 page:38	10 to 5000 mg/kg
		Defective seeds	IS 3576	0.01 to 10 g/100g
		Argemone oil	NAL/CHL/SOP/F025, Issue No:01, Issue Date 06.03.2017	Qualitative
		Light berries	NAL/CHL/SOP/F022, Issue No:01, Issue Date 06.03.2017	0.01 to 10 g/100g

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Pinheads or broken berries	IS 1798	0.01 to 10 g/100g
		Other foreign edible seeds	IS 4333(Part -1)	0.01 to 10 g/100g
		Floral waste	IS 5453 (Part-2)	0.05 to 10 g/100g
		Bitterness (Absorbance of picrocine)	IS 5453 (Part-2)	20 to 80 at 257 nm
		Flavor (Absorbance of safranal)	IS 5453 (Part-2)	20 to 50 at 330 nm
		Coloring strength (Absorbance of crocine)	IS 5453 (Part-2)	50 to 300 at 440 nm
		Defective rhizomes	IS 3576 / Physical Method	0.01 to 10 g/100g
		Black berries/Black Pepper	IS 1798	Qualitative
		Peroxidase test	NAL/CHL/SOP/F006, Issue No:01, Issue Date 06.03.2017	Qualitative
		Foreign resin	IS 7807	Qualitative
		Colophony resin	IS 7807	Qualitative
		Galbanum resin	IS 7807	Qualitative
		Ammoniaccum resin	IS 7807	Qualitative
		Mineral pigment	ASTA (4th Edition) Method 14.1	1 to 10 No
6.	Meat & meat products			
	Beef, Canned luncheon Meat, Canned Cooked Ham, Canned Chopped Meat, Canned Chicken, Canned Mutton and Goat Meat, Frozen Mutton, Chicken, Goat and Buffalo	Total Volatile Base–N	NAL/CHL/SOP/F010 Issue No:01, Issue Date 06.03.2017	0.5 to 100 mg/100g
		Total Fat	IS 5960 (Part 3)	1 to 35 g/100g
		Total Nitrogen	IS 5960 (Part 1)	1 to 50 g/100g
		Total Ash	IS 5960 (Part 2)	1 to 50 g/100g
		pH	IS 5960 (Part 10)	3 to 12
		Moisture	IS 5960 (Part 5)	5 to 90 g/100g
		Mould	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative

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		Living and dead insects	IS 6261	Qualitative
		Insect fragments	IS 6261	Qualitative
		Rodent contamination	AOAC (20 th Edition) 941.16: Chap.16 page:22	Qualitative
		Sodium metabisulphite	AOAC (20 th Edition) 990.28: Chap.47 page:38, IS 248	10 to 5000 mg/kg
		Sodium Nitrite	AOAC (20 th Edition) 973.31 IS 11747	10 to 1000 mg/kg
		Bones	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Detached cartilage ligaments	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Blood clots	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Skin	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Hair	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Strings	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Fibrous Tissue	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
7.	Milk & dairy products			
a	Raw Milk & Processed Milk & Milk	Solids Not Fat	AOAC (20 th Edition) 990.21 Page. 39, Chapter 33, IS 12333, IS 1479 (Part 2)	2.0 to 98.0 g/100g

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Products Liquid Milk Condensed/ Evaporated Milk (Sweetened Unsweetened) Milk Powder (Whole, Skimmed And Partly Skimmed Milk Powder) Cheese Curd Khoa Ice Cream Sterilized Milk Ghee/Butter Paneer, Low Fat Paneer.	Milk fat	AOAC (20 th Edition) 989.05:, Page. 18 Chapter 33 AOAC (20 th Edition) 932.06, Page. 72, Chapter33, IS 3507,IS 10484,IS 2785 IS 2802,IS 11721, IS 1479 (Part 2)	0.1 to 100 g/100g
		Sucrose	IS 4079,IS 2802, IS 1479 (Part 2)	0.5 to 80 g/100g
		Titrateable Acidity	IS 1166, IS 11766	0.1 to 3 g/100g
		Milk Protein	AOAC (20 th Edition) 991.20: Page. 10 Chapter 33 AOAC (20 th Edition) 930.29, Page. 71, Chapter 33,IS 7219	1 to 80 g/100g
		Moisture	AOAC (20 th Edition) 927.05:, Page. 71, Chapter 33 IS 3508,IS 3507, IS 10484, IS 2785, IS 11623	1 to 90 g/100g
		Total Ash	AOAC (20 th Edition) 930.30: Page. 71, Chapter 33, IS 1479 (Part 2)IS 14433	0.1 to 20 g/100g
		Total Solids	IS 12333,IS 2802, IS 1479 (Part 2),IS 11623	10 to 99 g/100g
		Insolubility Index	IS 12759	0.1 to 5 ml
		Refractive Index	IS 3508	1.33 to 1.80
		Free Fatty Acid as Oleic acid	IS 3508	0.01 to 5 g/100g
		Peroxide Value	IS 3508	0 to 250 meq O ₂ /kg
		Salt as NaCl	IS 2785,IS 3507	1 to 10 g/100g

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		Acidity as Lactic Acid	IS 2802, IS 3507, IS 3508, IS 1479 (Part 1)	0.1 to 10 g/100g
		Scorched Particles	IS 13500	7.5 to 32.5 mg
		Butyro Refractometer reading	IS 3508	10 to 80
		Reichert-meissel value	IS 3508	10 to 35
		Polenske value	IS 3508	0.1 to 10
		Baudouins Test	IS 3508	Qualitative
		pH	IS 1479 (Part 1)	3 to 12
		Lactose	IS 1479 (Part 1)	1 to 80 g/100g
		Acid insoluble ash	IS 14433	0.01 to 3 g/100g
		Potassium	AOAC (20 th Edition) 990.23: Page. 73, Chapter 33, IS 9497	0.01 to 3 g/100g
		Sodium	AOAC (20 th Edition) 990.23, Page. 73, Chapter-33, IS 9497	0.01 to 3 g/100g
		Calcium	IS 1479 (Part 2) , IS 5949	0.1 to 3 g/100g
		Magnesium	IS 1479 (Part 2), IS 5949	0.005 to 3 g/100g
		Melamine	IS 16195	1 to 10 µg/kg
		Filthy	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Putrid	NAL/CHL/SOP/F023, Issue No:01, Issue Date 06.03.2017	Qualitative
		Rotten	NAL/CHL/SOP/F004 Issue. 01, Issue No:01, Issue Date 06.03.2017	Qualitative
		Decomposed /diseased animal substance / vegetable substance	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Coloring Matter	NAL/CHL/SOP/F002, Issue No:01, Issue Date 06.03.2017	Qualitative

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		Worms	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Weevils /Insects	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Detergents	NAL/CHL/SOP/F012 Issue No:01, Issue Date 06.03.2017	Qualitative
		Added Preservative(SO ₂)	AOAC (20th Edition) 990.28: Chapter 47 Page:38	10 to 5000 mg/kg
		Mineral oil	IS 15642 (Part-2)	Qualitative
		Lactate content	IS 11202	0.1 to 5.0 mg/g
		Vegetable oil	IS 15642 (Part-2), IS 1479 (Part-1)	Qualitative
		Moisture	IS 10484 Appendix A	5 to 90 g/100g
		Milk fat paneer or chana	IS 10484 Appendix B	5 to 80g/100g
		Rancidity	NAL/CHL/SOP/F025, Issue No:01, Issue Date 06.03.2017	Qualitative
		Weight / Volume (gms/l)	IS 2802	250 to 1000 g/l
		Solubility percent	NAL/CHL/SOP/F017, Issue No:01, Issue Date 06.03.2017	90 to 100 g/100g
		Iodine as iodide	IS 7224 Clause. A2	Qualitative
		Lumps	IS 1165	Qualitative
		Animal body fat	NAL/CHL/SOP/017, Issue No:01, Issue Date 06.03.2017	Qualitative
		Casein in protein	NAL/CHL/SOP/017, Issue No:01, Issue Date 06.03.2017	80 to 100 g/100g

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		Ash including P ₂ O ₅	NAL/CHL/SOP/017, Issue No:01, Issue Date 06.03.2017	1 to 10 g/100g
		Curd Content	IS 3507	0.1 to 10 g/100g
		Phosphates in Ice Cream	NAL/CHL/SOP/017, Issue No:01, Issue Date 06.03.2017	Qualitative
b.	Adulterants, Preservative & Neutralizers in Dairy Products	Cane Sugar	IS 1479 (Part 1)	Qualitative
		Starch	IS 1479 (Part 1)	Qualitative
		Cellulose	NAL/CHL/SOP/F012 Issue No:01, Issue Date 06.03.2017	Qualitative
		Urea	IS 1479 (Part 1)	Qualitative
		Ammonium Compounds	IS 1479 (Part 1)	Qualitative
		Sulphates	NAL/CHL/SOP/F012 Issue No:01, Issue Date 06.03.2017	Qualitative
		Glucose	NAL/CHL/SOP/F012 Issue No:01, Issue Date 06.03.2017	Qualitative
		Sodium Chloride	NAL/CHL/SOP/F012 Issue No:01, Issue Date 06.03.2017	Qualitative
		Nitrates	IS 1479 (Part 1)	Qualitative
		Formalin	IS 1479(Part 1), IS 1479(Part 2)	Qualitative
	Hydrogen Peroxide	IS 1479 (Part 1)	Qualitative	
	Boric acid & Borate	NAL/CHL/SOP/F012 Issue No:01, Issue Date 06.03.2017	Qualitative	
	Salicylic acid	IS 1479 (Part 1)	Qualitative	
8.	Beverages (Alcoholic/Non-alcoholic)			
	Alcoholic	Aldehydes	IS 3752	(1 g to 500 g)/100 L

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	Beverages/ Non Alcoholic Beverages (Gin, Vodka, Whisky, Premix Vodka, Malt Grain Blended Whisky, Grape Brandy, Blended Grape Brandy, Rum, White Rum, Premix/Flavored Rum, Plain Country Spirit, Blended Country Spirit, Spiced Country Spirit) Beer, Draught Beer, Low Alcoholic Beverages	Alcohol as Ethanol	IS 3752	(1 g to 70 g)/ 100 g
		Esters	IS 3752	(1 g to 750 g)/ 100 L
		Total Acidity	IS 3752	(1 g to 5000 g)/100 L
		Residue on Evaporation	IS 3752	0.01 to 90 %
		Volatile acidity	IS 3752	(1 g to 200 g)/ 100 L
		Ash	IS 3752	0.01 to 2 g/100 ml
		Fixed acidity	IS 3752	(1 g to 1000 g)/100 L
		Furfural	IS 3752	(1 g to 20 g)/ 100 L
		Higher alcohols	IS 3752	(1 g to 800 g)/ 100 L
		Methyl alcohol	IS 3752	(1 g to 50 g)/ 100 L
		pH	AOAC (20 th Edition) 981.12: Page. 02, Chapter 42, IS 3865	2 to 10
		Sugar	AOAC (20 th Edition) 925.35: Page. 18, Chapter 37	0.5 to 50 %
		Total Sulphur di-oxide	IS 7585	1 to 1000 mg/L
		Free Sulphur di-oxide	IS 7585	1 to 1000 mg/L
	Extraneous matter	IS 4333 (Part 1)	0.01 to 10 g/100g	
	Live & dead insects	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative	
	Insect fragment	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative	
	Rodent contamination	AOAC (20 th Edition) 941.16: Page. 22, Chapter 16	Qualitative	
	Chloral hydrate	IS 8538	Qualitative	
	Paraldehyde	IS 8538	Qualitative	

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		Hydrocyanic Acid as HCN	AOAC (20 th Edition) 915.03: Chapter 49 Page.126	1 to 1000 mg/kg
		Colour	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Odour	NAL/CHL/SOP/F023, Issue No:01, Issue Date 06.03.2017	Qualitative
		Taste	NAL/CHL/SOP/F023, Issue No:01, Issue Date 06.03.2017	Qualitative
9.	Starch & starch products			
a.	Edible Starch And Starch Products	Moisture	IS 4706 (Part 1)	1 to 50 g/100g
		Total ash	IS 4706 (Part 2)	0.05 to 5 g/100g
		Cold water soluble	IS 4706 (Part 1)	0.05 to 70 g/100g
		Starch	IS 4706 (Part 2)	1 to 99 g/100g
		Protein	IS 4706 (Part 2)	0.05 to 25 g/100g
		pH		2 to 10
		Free Acidity		0.05 to 10 g/100g
		Sulphur Dioxide		10 to 2500 mg/kg
		Crude Fibre		0.1 to 25 g/100g
		Sulphated ash		0.01 to 10 g/100g
		Alcoholic acidity		0.01 to 5 g/100g
		Dietary fiber	AOAC (20 th Edition) 985.29: Page.98, Chapter-45	0.1 to 20 g/100g
		Gelling power	IS 1007	Qualitative
		Acid insoluble ash	IS 4706 (Part 2)	0.01 to 2 g/100g
10.	Sugar & Sugar			

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	products			
a.	Sugar boiled & Confectionary	Sulphated Ash	IS 6287	0.01 to 5 g/100g
		Acid Insoluble ash		0.01 to 5 g/100g
		Total fat		0.1 to 40 g/100g
b.	Chewing Gum, Bubble Gum	Gum content	IS 3988	1 to 20 g/100g
		Moisture	IS 6747	0.1 to 30 g/100g
		Sulphated Ash		0.01 to 5 g/100g
		Acid Insoluble ash		0.01 to 5 g/100g
		Reducing Sugar		0.1 to 15 g/100g
		Sucrose		50.0 to 75.0 g/100g
c.	Chocolates	Total fat	IS 1163	0.1 to 40 g/100g
		Milk Fat		0.1 to 40 g/100g
		Cocoa Solids		0.5 to 40 g/100g
		Acid Insoluble ash		0.01 to 5 g/100g
		Moisture	IS 15279	0.1 to 30 g/100g
d.	Sugar	Sucrose		90 to 99.5 g/100g
		Colour		50.0 to 500.0 ICUMCA
		Acid Insoluble ash		0.01 to 5 g/100g
		Specific Conductivity (10 ⁹ mhos/cm ²)	IS 13953	50 to 400 10 ⁶ mhos/cm ²
		Calcium oxide (mg/100gms)		30 to 300 mg/100g
		Acid Insoluble ash	IS 6287	0.01 to 5 g/100g
		Total starch	IS 15279	0.5 to 10 g/100g
		Sucrose	IS 12923	50.0 to 80.0 g/100g
e.	Gur & Jaggery	Extraneous matter		0.01 to 10 g/100g
		Total Ash		0.1 to 5 g/100g
		Acid Insoluble ash		0.01 to 5 g/100g
		Moisture	IS 8847	0.1 to 30 g/100g
		Total Ash		0.1 to 5 g/100g
f.	Syrup	Reducing Sugar		0.1 to 15 g/100g
		Melting point	IS 6385	220 °C to 250 °C
		Moisture	AOAC (20 th Edition)	0.1 to 30 g/100g

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			925.45: Page. 1, Chapter 44, IS 4941	
h.	Dextrose	Sulphated Ash	IS 1874	0.01 to 5 g/100g
		Acidity		0.1 to 5 g/100g
11	Honey & honey products	Specific gravity at 27°C	IS 4941	1.0 to 1.9
		Moisture		1.0 to 30 g/100 g
		Total reducing sugars		5.0 to 98 g/100 g
		Sucrose		1.0 to 20 g/100g
		Fructose and Glucose ratio (F/G Ratio)	IS 4941	0.5 to 2
		Ash		0.1 to 2 g/100 g
		Acidity expressed as formic acid		0.01 to 1 g/100g
		Fiehe's test		Qualitative
		Hydroxy Methyl Furfural (HMF)		5 to 200 mg/kg
		Optical Density at 660 nm		0.01 to 0.8
		pH	AOAC (20 th Edition) 981.12, Page. 2, Chapter 42	3.0 to 6.5
		Dirt	IS 4941	Qualitative
		Scum		Qualitative
		Pieces of beeswax		Qualitative
		Fragments of bees		Qualitative
		Insects		Qualitative
		Rodent contamination	AOAC (20 th Edition) 941.16: Page. 16 Chapter 16	Qualitative
12	Bakery & Confectionery products	Acid insoluble ash	IS12711	0.01 to 5 g/100g
		Acidity of Extracted Fat (as Oleic Acid)		0.05 to 5 g/100g
		Total Solids		10 to 98 g/100g
		Crude Fibre		0.1 to 25 g/100g
		Fat		1 to 40 g/100g
		Moisture		0.5 to 50 g/100g

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		Sulphur dioxide	AOAC (20 th Edition) 990.28: Page. 38 Chapter 47	10 to 500 mg/kg
		Sugar	NAL/CHL/SOP/F013 Issue No:01, Issue Date 06.03.2017	0.5 to 50 g/100g
		Protein	IS 7219,IS 5719	0.5 to 25 g/100g
		Alcoholic acidity	IS 1009	0.01 to 2 g/100g
		Dietary Fibre	AOAC (20 th Edition) 985.29:Page.98 Chapter-45	0.1 to 10 g/100g
		Peroxide Value	IS 12711	0.1 to 10.0 meq O ₂ /kg
		Sulphated ash	IS 6287	0.12 to 5 g/100g
13.	Stimulant Foods			
a.	Including Black Tea/Green Tea/ Coffee/Cocoa And By Products/ Coffee Powder/ Chicory/Tea/Roasted Coffee/ Ground Coffee/ Soluble Coffee Powder/ Instant Coffee, White Tea	Total Ash	IS 3077,IS 13854	1 to 25 g/100g
		Acid Insoluble Ash	IS 3077,IS 13857	0.01 to 5 g/100g
		Water Soluble Ash	IS 3077, IS 13855 AOAC (20 th Edition) 920.100: Page. 10 Chapter 30	1 to 90 g/100g
		Alkalinity of Soluble Ash	IS 3077, IS 13856	0.1 to 10 g/100g
		Moisture	IS 3077,,IS 13853	0.01 to 25 g/100g
		Solubility in Boiling Water	IS 2791	Qualitative
		Solubility In Cold Water		Qualitative
		Petroleum Ether Extract	IS 3077	0.05 to 25 g/100g
		Water Soluble Extract	IS 13862, IS 3077	20 to 70 g/100g
		Crude Fibre	NAL/CHL/SOP/F015, Issue No:01, Issue Date 06.03.2017	1.0 to 25 g/100g
		Ochratoxin A	AOAC (20 th Edition) 2000.09: Chapter 49 Page:68 NAL/INS/SOP/LC003 No:01, Issue Date 03.11.2017	5 to 100 µg/kg
		Caffeine Content	IS 2791	0.01 to 10 g/100g

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		Extraneous matter	IS 4333 (Part 1)	0.01 to 10 g/100g
		Live and dead insects	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Mould	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Rodent contamination	AOAC 20 th Edition)941.16 Chapter 22 Page:16	Qualitative
		Odour	Organoleptic analysis	Qualitative (Positive/Negative)
		Taint	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Mustiness	NAL/CHL/SOP/F023, Issue No:01, Issue Date 06.03.2017	Qualitative
		Iron fillings	IS 3633	10 to 500 mg/kg
		Total Polyphenols	NAL/CHL/SOP/F027, Issue No:01, Issue Date 06.03.2017	5 to 25 g/100 g
		Rancid/Obnoxious Flavor	NAL/CHL/SOP/F023, Issue No:01, Issue Date 06.03.2017	Qualitative
		Chicory	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Hydrocyanic Acid as HCN	AOAC (20 th Edition) 915.03: Chapter 49 Page;126	1 to 1000 mg/kg
		Sulphur dioxide	AOAC (20 th Edition) 990.28, Chapter 47 Page;38	10 to 5000 mg/kg
		Inorganic bromide	NAL/CHL/SOP/F028,	2.5 to 200 mg/kg

Vinay Kumar Tyagi
Convenor

Mallika Gope
Program Manager

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			Issue No:01, Issue Date 06.03.2017	
b	Carbohydrates			
		Xylose	NAL/INS/SOP/LC027,	0.5 to 2.5 g/100 g
		Glucose	Issue. 01, Issue Dated.	0.5 to 2.5 g/100 g
		Fructose	03.11.2017.	0.5 to 2.5 g/100 g
		Sucrose		0.5 to 2.5 g/100 g
		Sucralose		0.1 to 1.0 g/100 g
		Total Catechin	IS 15344, ISO 14502-2 NAL/CHL/SOP/F027 Issue No:01, Issue Date 06.03.2017	1.0 to 20 g/100 g
14.	Edible oils & fats			
a.	Coconut Oil, Cottonseed Oil, Groundnut Oil, Linseed Oil, Mustard Oil, Safflower Seed Oil, Sunflower Oil, Till Oil, Niger Seed Oil, Soyabean Oil, Maize Oil (Corn Oil), Fish Oil, Olive Oil (Virgin, Extra Virgin), Olive Pomace Oil, Palm Oil, Palmolein Oil, Palm Kernel Oil, Ricebran Oil, Almond Oil, Vanaspathy	Refractive index	IS 548 (Part 1)	1.3 to 1.8
		Saponification value		168 to 300
		Iodine Value		7.5 to 250
		Unsaponifiable Matter		0.1 to 15 g/100 g
		Acid Value		0.01 to 20.0
		Peroxide value		0 to 50 meq/kg
		Rancidity	NAL/CHL/SOP/F025 Issue No:01, Issue Date 06.03.2017 IS 548 (Part 1)	Qualitative
		Argemone oil	NAL/CHL/SOP/F025 ,Issue No:01, Issue Date 06.03.2017 IS 548 (Part 2) , IS 15642 (Part 1&2)	Qualitative
		Specific Gravity	IS 548 (Part 1)	0.5 to 2
		Karanja Oil	IS 548 (Part 2)	Qualitative
		Neem Oil		Qualitative
		Hydrocyanic Acid		Qualitative
		Mineral Oil		Qualitative
	Kusume Oil		Qualitative	

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		Castor Oil	IS 548 (Part 2)	Qualitative
		Melting point	AOAC (20 th Edition) 920.157,Page.4, Chapter 41	30 °C to 100 °C
		Flash point	IS 1448 (Part 21)	40°C to 400°C
		Poly bromide test	NAL/CHL/SOP/F025 Issue No:01, Issue Date 06.03.2017	Qualitative
		Bellier Turbidity Test	NAL/CHL/SOP/F025 Issue No:01, Issue Date 06.03.2017 IS 548 (Part 2)	10 °C to 100°C
		Cloud point	NAL/CHL/SOP/F025 Issue No:01, Issue Date 06.03.2017	(-) ¹⁰ °C to 50°C
		Moisture / Volatile matter	IS 548 (Part 1)	0.01 to 2 g/100 g
		Olive Pomace oil	NAL/CHL/SOP/F025 Issue No:01, Issue Date 06.03.2017 IS 548 (Part 2)	Qualitative
		Propyl Gallate	AOAC (20 th Edition)	3 to 100 mg/kg
		Ethyl Gallate	983.15:	3 to 100 mg/kg
		Octyl Gallate	Page. 02, Chapter 47	10 to 200 mg/kg
		Dodecyl Gallate	NAL/INS/SOP/LC015	10 to 200 mg/kg
		Ascorbyl Palmitate	Issue. 01 Dated.03.11.2017	10 to 300 mg/kg
		BHA (Butylated Hydroxy Anisole)	AOAC (20 th Edition) 983.15: Page. 02,	3 to 200 mg/kg
		BHT	Chapter 47	3 to 200 mg/kg
		TBHQ	NAL/INS/SOP/LC014 Issue. 01 Dated. 03.11.2017	3 to 100 mg/kg
		Color	IS 548 (Part 1)	0.1 to 70
		Free Fatty acid (as Oleic	IS 548 (Part 1)	0.01 to 2g/100g

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		acid,Lauric acid, ricinoleic acid, Palmitic acid)		
		Linseed Oil (Hexabromide Test)	NAL/CHL/SOP/F025 Issue No:01, Issue Date 06.03.2017 IS 548 (Part 2)	Qualitative
		Teaseed oil	NAL/CHL/SOP/F025 Issue No:01, Issue Date 06.03.2017, AOAC (20 th Edition) 936.12: Page. 54 Chapter 41	Qualitative
		Sesame Oil (Baudouins Test)	NAL/CHL/SOP/F025 Issue No:01, Issue Date 06.03.2017 AOAC (20 th Edition) 893.01: Page. 54, Chapter 41 IS 548 (Part 2)	Qualitative
		Insoluble Impurities	IS 548 (Part 1)	0.05 to 2 g/100g
		Semi – Siccative Oil	NAL/CHL/SOP/F025 Issue. 01, Issue Dated. 04.05.2016	Qualitative
		Cotton seed Oil (Halphen's Test)	NAL/CHL/SOP/F025 Issue No:01, Issue Date 06.03.2017, IS 548 (Part 2): AOAC (20 th Edition) 897.02: Page. 52, Chapter 41	Qualitative
		Reichert Meissel value	IS 548 (Part 1)	2 to 30
		Polenske Value	IS 548 (Part 1)	1 to 50
		Added Colouring Matter	NAL/CHL/SOP/F002 Issue No:01, Issue Date 06.03.2017	Qualitative
		Butyro –Refractometer reading	IS 548 (Part 1)	10 to 80
		Oryzanal	IS 3448	1 to 2.5 g/100g

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		Hexane	NAL/INS/SOP/GC008 Issue No:1, Issue Date : 01/11/2017	1.0 to 10 mg/kg
15.	Food additives & preservatives			
a.	Common Salt, Iodized Salt And Iron Fortified Common Salt	Chloride as NaCl	IS 253, IS 7224: 2006	90 to 100 g/100g
		Matter soluble in water other than sodium chloride		0.1 to 5 g/100g
		Moisture	IS 253, IS 7224	0.1 to 10 g/100g
		Water insoluble Matter		0.1 to 5 g/100g
		Magnesium		0.01 to 1 g/100g
		Iodine content	IS 7224	1 to 100 mg/kg
		Sulphate as SO ₄	IS 253, IS 7224	0.05 to 1 g/100g
		Calcium		0.01 to 2 g/100g
		Alkalinity as Na ₂ CO ₃		0.01 to 1 g/100g
		Potassium Ferro cyanide		Qualitative
		pH	IS 12981	4 to 14
		Phosphorus pentoxide	IS 14703	0.01 to 0.1 g/100g
b.	Vinegar (Brewed Or Alcoholic Vinegar, Synthetic Or Wine Vinegar)	Total Acidity	IS 3752, AOAC (20 th Edition) 371.1.37: 942.15	1 to 20 g/100ml
		Residual Alcohol	IS 3752	0.1 to 2 g/100ml
		Total Solids	IS 14703	0.1 to 10 g/100ml
		Total Ash		0.01 to 5 g/100ml
		Soluble Solids		0.05 to 1 g/100ml
c.	Citric Acid	Citric acid	IS 5464	90 to 100 g/100g
		Sulphate		Qualitative
		Halides (Chloride)		Qualitative
		Sulphated ash		0.01 to 1 g/100g
		Oxalates		Qualitative
		Water content		0.1 to 10 g/100g
		Readily carbonizable substances		Qualitative
d.	Ascorbic Acid	Purity	IS 5342	95 to 100 g/100g

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		Loss on drying	IS 4818	0.05 to 1 g/100g
		Sulphated ash	IS 4750	0.05 to 2 g/100g
e.	Monosodium Glutamate	Purity	IS 9505	90 to 100 g/100g
		Loss on drying	IS 1699	0.1 to 5 g/100g
		Chloride	IS 9505	0.25 to 10 g/100g
		pH		4 to 8
		Solubility		Qualitative
		Appearance	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		f.	Calcium Chloride	Matter Insoluble in Water
Calcium chloride				90 to 100 g/100g
Magnesium chloride				0.01 to 1 g/100g
Alkalinity as Ca(OH) ₂				0.001 to 1 g/100g
Alkali Chlorides as NaCl				0.1 to 2 g/100g
Magnesium and alkali salts				0.1 to 2.0 g/100g
Ammonium salts				Qualitative
Oxidizing substance				Qualitative
Sulphates				0.001 to 0.2 g/100g
Magnesium				0.01 to 2 g/100g
Potassium				0.01 to 2 g/100g
Sodium				0.01 to 2 g/100g
pH				4.5 to 8.5
g.	Acetic Acid			Solubility in Water
		Relative density @ 27°C	IS 82	1.0 to 1.6 g/cm ³
		Acetic acid content	IS 695	95 to 100 g/100g
		Crystallizing point		10 °C to 25 °C
		Residue on Evaporation		0.001 to 0.1 g/100g
		Chlorides		Qualitative
		Sulphates		1 to 100 mg/kg
		Formic acid		0.01 to 0.5 g/100g
		Acetaldehyde		0.01 to 0.5 g/100g
		Oxidizable impurities		Qualitative
Water content		0.05 to 0.2 g/100g		

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h.	Potassium Meta Bisulphite	Purity	IS 4751	90 to 100 g/100g
		Water Insoluble matter		0.01 to 0.1 g/100g
		Thio sulphate		Qualitative
		pH		3 to 8
i.	Ammonium Bicarbonate	Purity	IS 2697	90 to 100 g/100g
		Chloride as Cl		0.1 to 5 g/100g
		Sulphate as SO ₄		Qualitative
j.	Phosphoric Acid	Purity	IS 10508	70 to 100 %
		Nitrates		Qualitative
		Volatile Acid		Qualitative
		Chloride		Qualitative
		Sulphate		Qualitative
		Fluoride		Qualitative
k.	Flavours	Colour	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Specific Gravity	AOAC (20 th Edition) 920.127: Page. 1, Chapter 36	0.8 to 2.0
		Refractive Index	AOAC (20 th Edition) 920.141 Page. 19, Chapter 36	1.3 to 1.6
		Moisture	IS 5464, NAL/CHL/SOP/F030 Issue No:01, Issue Date 06.03.2017	0.1 to 90 g/100g
l.	Baking Powder Products, Catechu, Gelatin, Silver Leaf (Chand-Kiwarq), Pan Masala, Low And High Fat Cocoa Powder, Carob Powder	Extraneous matter	IS 4333 (Part 1)	0.01 to 10 g/100g
		Live & Dead insects	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Mould	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Rodent contamination	AOAC (20 th Edition) 941.16:	Qualitative
		Tartaric acid or its salts	AOAC (20 th Edition) 899.01	Qualitative

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			AOAC (20 th Edition) 930.16	
		Acid compounds of Aluminium	AOAC (20 th Edition) 925.06: AOAC (20 th Edition) 972.06	Qualitative
		Sand	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Earth	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Loss on Drying	IS 2962	1 to 25 g/100g
		Water insoluble residue (dried @ 100°C)	IS 2962	1 to 40 g/100g
		Alcohol insoluble residue in 90 % alcohol dried @100°C	IS 2962	1 to 50 g/100g
		Total ash on dry basis	IS 5643 Clause. 6 , IS 5719	0.05 to 15 g /100g
		Ash insoluble in HCl	IS 5643 Clause. 6	0.01 to 2 g/100g
		Hydrocyanic Acid as HCN/ Hydrogen cyanide	AOAC (20 th Edition) 915.03: Chapter 49	1 to 1000 mg/kg
		Moisture	IS 5719 Annex A	1 to 20 g/100g
		Gel strength	IS 5719 Annex B	Qualitative
		Sulphur dioxide	IS 5719 Annex D, AOAC (20 th Edition) 990.28	10 to 5000 mg/kg
		Nitrogen (on dry basis)	IS 5719 Annex E	5 to 30 g/100g
		Husk	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Rancidity	NAL/CHL/SOP/F025, Issue No:01, Issue Date 06.03.2017	Qualitative
		Obnoxious flavor	NAL/CHL/SOP/F023, Issue No:01, Issue Date 06.03.2017	Qualitative
		Neotame	NAL/CHL/SOP/F002,	Qualitative

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			Issue No:01, Issue Date 06.03.2017	
		Artificial flavor	NAL/CHL/SOP/F002, Issue No:01, Issue Date 06.03.2017	Qualitative
		Sulphurdioxide	AOAC (20 th Edition) 990.28 Page. 38, Chapter 47	10 to 5000 mg/kg
		Total ash	IS 7237	0.1 to 5 g/100g
		Acid insoluble matter	IS 7237	0.1 to 5g/100g
		Tannin content	IS 7237	Qualitative
		Hydrogen Phosphide as AIP	NAL/CHL/SOP/F029, Issue No:01, Issue Date 06.03.2017	0 to 1000 mg/kg
		Inorganic bromide	NAL/CHL/SOP/F028, Issue No:01, Issue Date 06.03.2017	5 to 1000 mg/kg
		Clay	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Grit	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Insect fragments	IS 6261	Qualitative
		Phosphorous as P ₂ O ₅	IS 1623	0.1 to 3500 mg/kg
		Potassium iodate as Iodine(I ₂)	IS 7224	1 to 200mg/kg
		Methyl Mercury	AOAC 20 th Edition 983.20, Page. 43, Chapter 09 NAL/SOP/INS/GC009, Issue. 01, Issue Dated. 19.08.2016,	10.0 to 50 µg/kg
16.	Vitamin In Food	Vitamin-A	AOAC (20 th Edition)	100 to 2500 IU/100g

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	And Complimentary Food Substances		992.06: Page. 2 Chapter 50 NAL/INS/SOP/LC016 Issue. 01 Dated. 03.11.2017	
		Vitamin-D	AOAC (20 th Edition) 992.06: Page. 2 Chapter 50 NAL/INS/SOP/LC017 Issue. 01 Dated. 03.11.2017	100 to 2500 IU/100g
		Vitamin – E (Tocopherol)	NAL/INS/SOP/LC018 Issue. 01 Dated. 03.11.2017	10 to 100 mg/kg
		Vitamin – K	NAL/INS/SOP/LC019 Issue. 01 Dated. 03.11.2017	0.5 to 100 mg/kg
		Vitamin – B6 (Pyridoxine)	AOAC (20 th Edition) 2004.07: Page. 34, Chapter 50, NAL/INS/SOP/LC021 Issue. 01 Dated. 03.11.2017	10 to 500 mg/kg
		Vitamin - B9 (Folic Acid)	NAL/INS/SOP/LC021 Issue. 01 Dated. 03.11.2017	10 to 500 mg/kg
		Vitamin - B2 (Riboflavin)	AOAC (20 th Edition) 985.31: Page. 8, Chapter 50, NAL/INS/SOP/LC020, Issue. 01 Dated. 03.11.2017	10 to 500 mg/kg
		Vitamin -B1 (Thiamine)	AOAC (20 th Edition) 986.27:	10 to 500 mg/kg

Vinay Kumar Tyagi
Convenor

Mallika Gope
Program Manager

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			Page. 10 Chapter 50, NAL/INS/SOP/LC020, Issue. 01 Dated. 03.11.2017	
		Vitamin – B3 (Niacin)	NAL/INS/SOP/LC020 Issue. 01 Dated. 03.11.2017	10 to 500 mg/kg
		Vitamin – B5 (Pantothenic acid)	NAL/INS/SOP/LC021 Issue. 01 Dated. 03.11.2017	0.5 to 100 mg/kg
		Vitamin C (Ascorbic acid)	NAL/INS/SOP/LC025 Issue. 01 Dated. 03.11.2017	10 to 500 mg/kg
		Vitamin - B12 (Cyanocobalamin)	NAL/INS/SOP/LC022 Issue. 01 Dated. 03.11.2017	10 to 500 mg/kg
		Beta Carotene	NAL/INS/SOP/LC023 Issue. 01 Dated. 03.11.2017	0.5 to 100 mg/kg
17.	Follow- Up Formula- Complementary Food	Moisture	AOAC (20 th Edition) 927.05 Page. 71, Chapter 33	1 to 10 g/100g
		Total Milk Protein	IS 7219	1 to 50 g/100g
		Total Fat	IS 11721	1 to 50 g/100g
		Total ash	IS 14433	0.01 to 5 g/100g
		Insolubility index	IS 12759	0.1 to 5 ml
		Sodium	IS 9497	10 to 300 mg/100g
		Potassium	IS 9497	10 to 600 mg/100g
		Milk Fat	IS 1655	5 to 30 g/100g
		Chloride	IS 2785	10 to 500 mg/100g
		Calcium	IS 5949	10 to 600 mg/100g
		Phosphorus	AOAC (20 th Edition): 995.11 Page.49, Chapter-45	10 to 400 mg/100g
		Magnesium	IS 5949	10 to 500 mg/100g
		Iodine	IS 7224	0.1 to 100 mg/100g
18	Nutritional			

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a.	parameters Products Raw/ Processed/ Cooked/Frozen/ Ready-To-Eat Foods/Feeds/ Fruits & Vegetables (Grapes/Gherkins/ Onions/Pomegran ates/Mangoes) Processed Fruits & Vegetables/ Raw/Processed Foods/ Supplementary Foods/Food Grains/ Cereals & Pulses/Dairy & Dairy Products/ Seafood, Fishery & Fishery Products/ Egg & Egg Products/ Nut & Nut Products (Groundnut Etc.)/ Oilseeds & Products/ Spices, Spice Products & Condiments/ Meat & Meat Products/Poultry & Poultry Products/ Sugar & Sugar	Energy	NAL/CHL/SOP/F024, Issue No:01, Issue Date 06.03.2017	5 to 5000 kcal/100g
		Carbohydrate	IS 1656 AOAC (20 th Edition) 986.25: Page. 18 Chapter 50, NAL/CHL/SOP/F016, Issue No:01, Issue Date 06.03.2017	0.1 to 100 g/100g
		Fat	NAL/CHL/SOP/F014, Issue No:01, Issue Date 06.03.2017 IS 12711, AOAC (20 th Edition): 922.06, Page. 5, Chapter 32, AOAC (20 th Edition) 989.05, Page. 18, Chapter 33 IS 5960(Part 3)	0.1 to 99.8 g/100g
		Protein	IS 7219	0.1 to 80 g/100g
		Crude Fibre	NAL/CHL/SOP/F015, Issue No:01, Issue Date 06.03.2017 IS 12711	0.1 to 20 g/100g
		Sodium	IS 9497	0.01 to 15 g/100g
		Potassium	IS 9497	0.01 to 15 g/100g
		Calcium	AOAC (20 th Edition) 944.03: Chapter 32, Page. 4 IS 7224, IS 5949	0.01 to 15 g/100g
		Magnesium	IS 7224, IS 949 AOAC (20 th Edition) 920.09: Page. 11, Chapter 3.0, IS 5949	0.1 to 15 g/100g
		Phosphorus	AOAC (20 th Edition)	0.005 to 9 g/100g

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	Products/ Stimulant Foods (Tea, Coffee & Related Products) / Bakery & Confectionery/ Flavors, Seasonings & Food Additives/ Pet Food/ Beverages/ Herbs, Health Drinks & Mixes/ Infusion Foods		995.11: Page. 49 Chapter 45,	
		Dietary Fibre	AOAC (20 th Edition) 985.29: Page. 98, Chapter-45	0.1 to 50 g/100g
		Iron	AOAC (20 th Edition) 991.11: Page. 19, Chapter 9	0.25 to 500 mg/100g
		Saturated fatty acid	AOAC (20 ^t Edition) 996.06: Page.20,Chapter 41 ,NAL/SOP/INS/001 Issue. 01, Issue Dated. 20.01.2016	0.1 to 90 g/100g
		Monounsaturated fatty Acid	AOAC (20 th Edition) 996.06: Page.20,Chapter 41 NAL/SOP/INS/001 Issue. 01, Issue Dated. 20.01.2016	0.1 to 90 g/100g
		Polyunsaturated fatty Acid	AOAC (20 th Edition) 996.06: Page.20,Chapter 41 ,NAL/SOP/INS/001 Issue. 01, Issue Dated. 20.01.2016	0.1 to 90 g/100g
		Trans fatty acid	AOAC (20 th Edition) 996.06: Page.20,Chapter 41 ,NAL/SOP/INS/001 Issue. 01, Issue Dated. 20.01.2016	0.1 to 90 g/100g
		Cholesterol	AOAC (20 th Edition) 994.10: Page.124, Chapter 45 NAL/SOP/INS/002 Issue. 01, Issue Dated. 20.01.2016	1 to 100 mg/100g
	Oil seeds & by-	Acid Insoluble Ash	ISO 5985:2002,	0.01 to 5.0 g/100g

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	products		IS 1155:1968	
		Adhered Soil	GAFTA Method of Analysis - 14.0;2003	0.5 to 20.0g /100g
		Admixture	GAFTA Method of Analysis 26.1:2018	0.01 to 25 g/100g
		Ash	ISO 5984:2002, IS 1155:1968	0.1 to 10 g/100g
		Broken Kernels/ Damaged Grain	Grain Inspection Hand Book II, Chapter 10.21:2013 by U.S. Department of Agriculture, IS 4333 (Part 1):1996	0.01 to 40g/100g
		Crude Fiber	ISO 6865:2000 / AOCS 7 th Edition Ba6 – 84: 2017	0.1 to 25 g/100g
		Crude Fat	ISO 6492:1999/ GAFTA Method of Analysis 3.0 :2018	0.01 to 50.0g/100g
		Foreign Matter	Grain Inspection Hand book II, Chapter 10.17 2013 by U.S. Department of Agriculture, IS 4333 (Part 1):1996	0.01 to 10g/100g
		Free Fatty Acid as Oleic acid	IS 548 (PART 1):1964	0.01 to 2.0g/100g
		Free Flowing	NAL/CHL/SOP/F041, Issue No:01, Issue Date:15.04.2018	Qualitative
		Free from dead / live Insect	IS 6261:1971, NAL/CHL/SOP/F004, Issue No:01, Issue Date 06.03.2017	Qualitative
		Free From Weevils	IS 4333 Part 1:1996 RA 2012	0.01 to 50.0g /100g
		Moisture	ISO 6496:1999 /	1.0 to 25 g/100g

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			GAFTA Method of Analysis :2.2:2018	
		Musty Mouldy or other objectionable odour	Organoleptic Analysis	Qualitative
		Discoloration	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017(Visual Examination)	Qualitative
		Khapra beetle	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017(Visual Examination)	Qualitative
		Noxious weeds or Weed seed	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017(Visual Examination)	Qualitative
		Rodent Contamination	AOAC 20 th Edn 2016, 941.16	Qualitative
		Peroxide Value	IS 548 Part-1:1964 RA 2015	0.02 to 50.0 meq/kg
		Crude Protein	ISO 5983-1:2005 / GAFTA Method of Analysis 4.1:2018/ IS 7219:1973- RA 2015 /AOCS Ba 4d-90:2017	0.5 to 60.0g /100g
		Protein Solubility (In KOH)	NAL/CHL/SOP/F059, Issue No:01, Issue Date:15.04.2018	60.0 to 90g/100g
		Protein Dispersibility Index	NAL/CHL/SOP/F057 Issue No:01, Issue Date:15.04.2018 AOCS 7 th Edition Ba 10b-09:2017	10% to 40 %
		Nitrogen Solubility Index	NAL/CHL/SOP/F058,	70% to 95%

Vinay Kumar Tyagi
Convenor

Mallika Gope
Program Manager

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			Issue No:01, Issue Date:15.04.2018 AOCS 7 th Edition Ba 11 - 65	
		Sand	GAFTA Method of Analysis 14.0:2003	0.5 to 20.0g /100g
		Trypsin Inhibitor Unit	NAL/CHL/SOP/F060, Issue No:01, Issue Date:15.04.2018 AOCS 7 th Edition Ba12 – 75:2017	5000 to 30000 TIU/g
		Urease Activity	GAFTA Method of Analysis :21.0:2018/ ISO 5506:1988/ AOCS 7 th Edition Ba 9-58:2017	0.05 to 4.0 mg N/g/min@30°C
		Vetch/Khesari Dal	IS 2400:1976 RA 2015	Qualitative
		Water Activity	ISO 18787:2017, Issue No:01, Issue Date:15.04.2018 NAL/CHL/SOP/F041	0.03 to 0.80 aW
	Organic products - Rice and Maize	Foreign matter	Grain Book,-10.13 2013 by U.S. Department of Agriculture IS 4333 (Part 1):1996	0.01 to 10 %
		Broken and Fragments	Grain Book,10.20 2013 by U.S. Department of Agriculture IS 4333 (Part 1):1996	0.01 to 40 %
		Other rice including red grains	IS 4333 (Part 1):1996	0 to 25 %
		Damaged , Discoloured	Grain Book,10.20 2013 by	0.01 to 40 %

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		and chalky grains	U.S. Department of Agriculture IS 4333 (Part 1):1996	
		Moisture	ISO 712:2009, IS 4333 (Part 1):1996	1.0 to 25 g/100 g
		Length	NAL/CHL/SOP/F050, Issue No:01, Issue Date:15.04.2018	0.01 mm to 10 mm
		Width	NAL/CHL/SOP/F050, Issue No:01, Issue Date:15.04.2018	0.01 mm to 5 mm
		Purity	NAL/CHL/SOP/F047, Issue No:01, Issue Date:15.04.2018	75 to 100%
19.	Food & Agriculture Products			
a.	Cereals , Pulses & Cereal Products, Herbs , Spices , Condiments, Nut & Nut Product & Infant Foods	Mycotoxins		
		Aflatoxin B1	AOAC (20 th Edition) 2005.08: Page. 23, Chapter 49 by HPLC, NAL/INS/SOP/LC002, Issue No:01, Date: 19.03.2015, Rev No:01 Date:22.12.2015	0.5 to 50 µg/kg
		Aflatoxin B2		0.5 to 50 µg/kg
		Aflatoxin G1		0.5 to 50 µg/kg
		Aflatoxin G2		0.5 to 50 µg/kg
		Ochratoxin A	AOAC (20 th Edition) 2000.09: Page. 68 Chapter 49 by HPLC	5.0 to 50 µg/kg
b.	Cereals , Pulses & Cereal Products, Herbs , Spices , Condiments, Nut & Nut Product & Infant Foods	Naturally Occurring Toxin		
		Hypericine	NAL/INS/SOP/LC007 Issue. 01, Issue Dated. 03.11.2017	0.25 to 3.0 mg/kg
		Saffrole	NAL/INS/SOP/LC008	1 to 20.0 mg/kg

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			Issue. 01, Issue Dated. 03.11.2017	
		Agaric acid	NAL/INS/SOP/LC006 Issue. 01, Issue Dated. 03.11.2017	10 to 150 mg/kg
		Hydrocyanic acid	AOAC (20 th Edition) 915.03 Page.123 Chapter-49	1 to 100 mg/kg
		Amino Acid		
		DL-Alanine	NAL/INS/SOP/LC028 Issue. 01, Issue Dated. 03.11.2017	100 to 5000 mg/100g
		DL-2 Amino-N-Butyric Acid		100 to 5000 mg/100g
		L-Lysine Monohydrochloride		100 to 5000 mg/100g
		DL-Nor-Leucine		100 to 5000 mg/100g
		L-Leucine		100 to 5000 mg/100g
		L-Arginine Monohydrochloride		100 to 5000 mg/100g
		DL-Aspartic Acid	NAL/INS/SOP/LC028 Issue. 01, Issue Dated. 03.11.2017	100 to 5000 mg/100g
		DL-Methionine		100 to 5000 mg/100g
		L-Ornithine Monohydrochloride		100 to 5000 mg/100g
		L-Cystine		100 to 5000 mg/100g
		DL-Phenylalanine		100 to 5000 mg/100g
		L-Proline		100 to 5000 mg/100g
		L-Glutamic Acid		100 to 5000 mg/100g
		DL-Serine		100 to 5000 mg/100g
		Glycine		100 to 5000 mg/100g
		DL-Threonine		100 to 5000 mg/100g
		L-Histidine Monohydrochloride		100 to 5000 mg/100g
		DL-Tryptophan		100 to 5000 mg/100g
		L-Tyrosine		100 to 5000 mg/100g
		DL-iso-Leucine		100 to 5000 mg/100g
		DL-Valine		100 to 5000 mg/100g
20.	Trace Metals And			

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	Minerals In Food And Food Agricultural Products			
a.	Vegetable & Vegetable product, Cereals, Pulses & Cereals Product, Fruit & Fruit Product, Canned & Processed Foods, Herbs, Spices & Condiments, Milk & Dairy Products, Nut & Nut Products, Starch & Starch Products	Heavy Metals		
		Lead	AOAC (20 th Edition) 999.11: Chapter 9 Page. 19	0.01 to 25 mg/kg
		Cadmium	AOAC (20 th Edition) 999.11: Chapter 9 Page. 19	0.025 to 10 mg/kg
		Arsenic	AOAC (20 th Edition) 963.21: Chapter 9 Page. 28	0.02 to 10 mg/kg
		Mercury	AOAC (20 th Edition) 971.21: Chapter 9 Page. 41	0.02 to 10 mg/kg
		Chromium	AOAC (20 th Edition) 2016.19: Chapter 50 Page. 68	0.25 to 15 mg/kg
		Nickel	AOAC (20 th Edition) 975.34: Chapter 9 Page. 48	0.25 to 15 mg/kg
		Tin	AOAC (20 th Edition) 980.19: Chapter 9 Page. 49	2.5 to 50 mg/kg
		Selenium	AOAC (20 th Edition) 986.15: Chapter 9 Page. 1	0.02 to 10 mg/kg
		Methyl Mercury	AOAC 20 th Edition 983.20 Chapter 9, Page. 43	10.0 to 50 µg/kg
		Minerals		
		Iron	AOAC (20 th Edition) 999.11: Chapter 9, Page. 19	0.25 to 25 mg/kg
		Zinc	AOAC (20 th Edition)	0.1 to 10 mg/kg

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			999.11: Chapter 9 Page. 19	
		Copper	AOAC (20 th Edition) 999.11: Chapter 9 Page. 19	0.25 to 25 mg/kg
21.	Added Natural colors & Test for synthetic colors for Food and Food Substances			
a.	Milk & Dairy Products, Oils & Fats, Fruits & Vegetable Products, Nuts & Raisins, Cereals & Cereal Products, Meat & Meat Products, Fish & Marine Products, Sugar & Sugar Products (Sweets & Confectionery), Honey & Honey Products, Spice & Spice products, Stimulant foods, Beverages (Alcoholic/Nonalcoholic)	Curcumin	NAL/CHL/SOP/F002, Issue No:01, Issue Date 06.03.2017	Qualitative
		Riboflavin		Qualitative
		Chlorophyll		Qualitative
		Beta Carotene		Qualitative
		Carotene		Qualitative
		Annatto Extract (Bixin)	NAL/CHL/SOP/F002, Issue No:01, Issue Date 06.03.2017	Qualitative
		Caramel colours(Plain)		Qualitative
		Caramel colours (Ammonium Sulphite Process)		Qualitative
		Ponceau 4R		Qualitative
		Carmoisine		Qualitative
		Erythrosine		Qualitative
		Tartrazine		Qualitative
		Sunset Yellow FCF		Qualitative
		Saffron		Qualitative
		Indigo carmine		Qualitative
	Brilliant blue FCF	Qualitative		
	Fast Green FCF	Qualitative		
22	Artificial sweeteners in Food and Food	Aspartame	NAL/CHL/SOP/F002, Issue No:01, Issue Date 06.03.2017	Qualitative
		Acesulfame-K		Qualitative
		Saccharin		Qualitative

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	Substances	Sucralose		Qualitative
23	Added Preservatives & Antioxidants in Food and Food Substances			
a.	Milk & Dairy Products, Oils & Fats, Fruits & Vegetable Products, Nuts & Raisins, Cereals & Cereal Products, Meat & Meat Products, Fish & Marine Products, Sugar & Sugar Products (Sweets & Confectionery) Honey & Honey Products, Spice & Spice products, Stimulant foods, Beverages (Alcoholic/Nonalcoholic), Food Additives	Benzoic Acid	NAL/INS/SOP/LC012, Issue. 01, Issue Dated. 03.11.2017	10 to 2500 mg/kg
		Sorbic Acid	NAL/INS/SOP/LC013, Issue. 01, Issue Dated. 03.11.2017	5 to 2500 mg/kg
		BHA	NAL/INS/SOP/LC014, Issue. 01, Issue Dated. 03.11.2017	3 to 500 mg/kg
		TBHQ	NAL/INS/SOP/LC014, Issue. 01, Issue Dated. 03.11.2017	3 to 500 mg/kg
VI.	ANIMAL FOOD & FEEDS			
1.	Pet Foods, Rapeseed Meal, Cotton Seed Cake, guar Meal, Poultry Feed Additives, Animal	Moisture	IS 7874 (Part 1)	1 to 20 g/100g
		Acid insoluble ash		0.01 to 5 g/100g
		Total ash		0.1 to 50 g/100g
		Crude Protein		1 to 50 g/100g
		Crude fibre		0.1 to 30 g/100g
		Crude fat		0.1 to 25 g/100g

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	Nutrition			
		Urea nitrogen		0.1 to 10 g/100g
	Supplements, oil Cake, Groundnut meal.	Phosphorus	IS 7874 (Part 2)	0.1 to 5 g/100g
		Calcium	IS 13574	0.01 to 10 g/100g
		Salt as NaCl	IS 7874 (Part 2)	0.1 to 25 g/100g
		Magnesium as Mg	IS 13574	0.01 to 10 g/100g
		Sodium as Na	IS 9497	0.1 to 25 g/100g
		Potassium as K	IS 9497	0.1 to 25 g/100g
		Fluoride	IS 7874 (Part 2)	1 to 1000 mg/kg
		Ammoniacal Nitrogen	IS 7874 (Part 1)	0.1 to 5 g/100g
VII.	MARINE /AQUA CULTURE FOOD PRODUCTS			
1.	Fish & Fish Products/ Shrimps Frozen Shrimps Or Prawns, Frozen Lobster, Frozen Squid, Frozen Finfish, Frozen Fish Fillets Or Minced Fish Flesh Or Mixtures, Dried Shark Fins, Salted Fish/Dried Salted Fish, Canned Finfish, Canned Shrimp, Canned Sardines Or Sardine Type Products, Canned Salmon, Canned	Acidity of Brine	NAL/CHL/SOP/F009 Issue No:01, Issue Date 06.03.2017	0.01 to 50 g/100g
		Moisture	IS 14950	5 to 98 g/100g
		Ash insoluble in dil.HCl	IS 14950	0.1 to 5 g/100g
		Salt as NaCl	IS 14950, AOAC (20 th Edition) 937.09: Chapter 35, Page. 9	0.01 to 15 g/100g
		Sulphur dioxide	AOAC (20 th Edition) 990.28: Chapter 47, Page. 38	10 to 50 mg/kg
		Total Volatile Base-N	NAL/CHL/SOP/F010 Issue No:01, Issue Date 06.03.2017	1 to 150 mg/100g
		Histamine	NAL/INS/SOP/LC009, Issue. 01, Dated. 03.11.2017	10 to 100 mg/kg
		Fat	AOAC (20 th Edition) 925.32: Page. 3, Chapter 34	1 to 50 g/100g
		Phosphorous as	NAL/CHL/SOP/F011	0.01 to 10 g/100g

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	Crab, Canned Tuna And Bonito	PO ₄ /P ₂ O ₅	Issue No:01, Issue Date 06.03.2017,AOAC (20 th Edition) 995.11: Page. 50, Chapter 45	
		Trimethylamine-nitrogen (TMA-N)	AOAC (20 th Edition) 971.14: Page. 9, Chapter 35	0.1 to 25 mg/100g
		Sodium	AOAC (20 th Edition) 969.23: Chapter 35 Page. 10 IS 9497 : 1980	2.5 to 1000 mg/kg
		Potassium	AOAC (20 th Edition) 969.23: Chapter 35 Page. 10 IS 9497	2.5 to 1000 mg/kg
		Boric Acid	AOAC (20 th Edition) 959.09: Chapter 47 Page. 16	0.1 to 10 g/100g
		Mould	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Living and dead insects	IS 6261	Qualitative
		Insect fragments	IS 6261	Qualitative
		Rodent contamination	AOAC (20 th Edition) 941.16: Chapter 16 Page. 22	Qualitative
		Sodium metabisulphite	AOAC (20 th Edition) 990.28: Chapter 38 Page. 38, IS 248	10 to 5000 mg/kg
		Sodium Nitrite	NAL/CHL/SOP/F020, Issue No:01, Issue Date 06.03.2017	10 to 1000 mg/kg
		Scales in Fish	NAL/CHL/SOP/F004	Qualitative

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			Issue No:01, Issue Date 06.03.2017	
		Fish Head	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Raw Fish	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Cooked Fish	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
		Gills	NAL/CHL/SOP/F004 Issue No:01, Issue Date 06.03.2017	Qualitative
VIII.	AYUSH PRODUCTS			
a.	Raw Material- Moringa Leaf powder, Cassia Bark, Ashwagandha Powder	Energy	NAL/CHL/SOP/F024, Issue No:01, Issue Date 06.03.2017	5 to 1000 kcal/100g
		Carbohydrate	NAL/CHL/SOP/F016, Issue No:01, Issue Date 06.03.2017	0.1 to 100g/100g
		Protein	IS 7219	0.1 to 80 g/100g
		Fat	AOAC (20 th Edition) 922.06: Chapter 32,	0.1 to 40 g/100g
		Cholesterol	AOAC (20 th Edition) 994.10: Page. 102, Chapter 45	1 to 100 mg/100g
IX	RESIDUES IN FOOD PRODUCTS			
a.	Fish and Fish Products, Prawn & Prawn Products, Shrimps	Antibiotics		
		Chloramphenicol	NAL/INS/SOP/LCMS003, Issue No:1, Issue Date : 14.03.2017	0.075 to 0.75 µg/kg
		Florfenicol		0.075 to 0.75 µg/kg
		Nitrofurantol Metabolites		

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		Amino -Oxazolidinone (AOZ)	NAL/INS/SOP/LCMS004, Issue No:1, Issue Date : 14.03.2017	0.5 to 3.0 µg/kg
		3-Amino-5-morpholinomethyl-2-oxazolidinone (AMOZ)		0.5 to 3.0 µg/kg
		Semicarbazide (SEM)		0.5 to 3.0 µg/kg
		Aminnohydantation(AHD)	NAL/INS/SOP/LCMS004, Issue No:1, Issue Date: 14.03.2017	0.5 to 3.0 µg/kg
		Nitrofuran parent drugs		
		Nitrofurazone (NFZ)	NAL/INS/SOP/LCMS005, Issue No:1, Issue Date : 14.03.2017	0.5 to 3.0 µg/kg
		Furazolidone (FZD)		0.5 to 3.0 µg/kg
		Nitrofurantoin (NFT)		0.5 to 3.0 µg/kg
		Furaltadone (FTD)		0.5 to 3.0 µg/kg
		Nitroimidazole		
		Metronidazole (MTZ)	NAL/INS/SOP/LCMS006, Issue No:1, Issue Date : 14.03.2017	1 to 5 µg/kg
		Ronidazole (RNZ)		1 to 5 µg/kg
		Quinolones/Flouro-quinolones		
		Oxolinic acid	NAL/INS/SOP/LCMS007, Issue No:1, Issue Date : 13.10.2016	25.0 to 300 µg/kg
		Difloxacin		75.0 to 600µg/kg
		Sarafloxacin		5.0 to 90 µg/kg
		Enrofloxacin		10.0 to 100 µg/kg
		Ciprofloxacin		10.0 to 100 µg/kg
		Danofloxacin		25.0 to 300 µg/kg
		Flumequine		50.0 to 400 µg/kg
		Norfloxacin		10 to 500 µg/kg
		Nalidixic acid		5.0 to 60 µg/kg
		Tetracyclines		
		Tetracycline	NAL/INS/SOP/LCMS008, Issue No:1, Issue Date : 14.03.2017	25.0 to 300 µg/kg
		4 –Epitetracycline		25.0 to 300 µg/kg
		Oxytetracycline		25.0 to 300 µg/kg
		4- Epioxytetracycline		25.0 to 300 µg/kg
		Chlortetracycline		25.0 to 300 µg/kg

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		4 –Epichlortetracycline		25.0 to 300 µg/kg
		Sulfonamides		
		Sulfadiazine	NAL/INS/SOP/LCMS009, Issue No:1, Issue Date : 14.03.2017	5.0 to 300 µg/kg
		Sulfamethoxazole		5.0 to 300 µg/kg
		Sulfamethoxypyridazine		5.0 to 300 µg/kg
		Sulfamethizole		5.0 to 300 µg/kg
		Sulfamethazine		5.0 to 300 µg/kg
		Sulfamerazine		5.0 to 300 µg/kg
		Sulfapyridine		5.0 to 300 µg/kg
		Sulfadimethoxine		5.0 to 300 µg/kg
		Sulfachloropyradazine		5.0 to 300 µg/kg
		Sulfathiazole-free acid		5.0 to 300 µg/kg
		Pesticides		
		Aldrin	NAL/INS/SOP/003 Issue. 02, Issue Date, 14.03.2017 (LC MSMS & GC-MS MS)	10.0 to 100 µg/kg
		Dieldrin		10.0 to 100 µg/kg
		Cis –Chlordane		10.0 to 100 µg/kg
		Trans chlordane		10.0 to 100 µg/kg
		DDE,o,p'	NAL/INS/SOP/003 Issue. 02, Issue Date, 14.03.2017 (LC MSMS & GC-MS MS)	10.0 to 100 µg/kg
		DDE,p,p'		10.0 to 100 µg/kg
		DDT,o,p'		10.0 to 100 µg/kg
		DDT,p,p'		10.0 to 100 µg/kg
		DDD,o,p'		10.0 to 100 µg/kg
		DDD,p,p'		10.0 to 100 µg/kg
		Fenitrothion		10.0 to 200 µg/kg
		Heptachlor		10.0 to 100 µg/kg
		Heptachlor epoxide		10.0 to 100 µg/kg
		Alpha –HCH		10.0 to 100 µg/kg
		Beta-HCH		10.0 to 100 µg/kg
		Delta-HCH		10.0 to 100 µg/kg
		Gamma-HCH		10.0 to 100 µg/kg
		Chlorpyrifos		10.0 to 200 µg/kg
		2,4 D		10.0 to 200 µg/kg
		Ethion		10.0 to 200 µg/kg
		Monochrtophos		10.0 to 200 µg/kg

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		Paraquate dichloride		10.0 to 200 µg/kg
		Trichlorophon		10.0 to 200 µg/kg
		Carbendazim		10.0 to 200 µg/kg
		Benomyl		10.0 to 200 µg/kg
		Carbofuron		10.0 to 200 µg/kg
		Cypermethrin		10.0 to 200 µg/kg
		Edifenphos		10.0 to 200 µg/kg
		Fenthion		10.0 to 200 µg/kg
		Fenvalerate		10.0 to 200 µg/kg
		Phenthoate		10.0 to 200 µg/kg
		Phorate		10.0 to 200 µg/kg
		Pirimiphos-methyl		10.0 to 200 µg/kg
		Endosulfan alpha isomer		10.0 to 200 µg/kg
		Endosulfan beta isomer		10.0 to 200 µg/kg
		Endosulfan sulfate		10.0 to 200 µg/kg
		Diazinon		10.0 to 200 µg/kg
		Malathion		10.0 to 200 µg/kg
		Methyl parathion		10.0 to 200 µg/kg
		Dichlorvos		10.0 to 200 µg/kg
		Chlorfenvinfos		10.0 to 200 µg/kg
		Carbaryl		10.0 to 200 µg/kg
		Ethoxyquin		10.0 to 200 µg/kg
		Quinolphos		10.0 to 200 µg/kg
		Endrin		10.0 to 100 µg/kg
		HCB		10.0 to 100 µg/kg
b.	Fish and Fish Products, Prawn & Prawn Products, Shrimps	Mycotoxins		
		Aflatoxin B1	NAL/INS/SOP/LC001, Issue No:1, Issue Date : 03.11.2017 by HPLC	5.0 to 50 µg/kg
		Aflatoxin B2		5.0 to 50 µg/kg
		Trace metal elements		
		Cadmium	IS 2237, AOAC (20 th Edition)999.11:	0.01 to 10.0 mg/kg
	Lead	IS 2237,AOAC	0.01 to 10.0 mg/kg	

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			(20 th Edition)972.23	
		Mercury	IS 2237: 1997 (RA 2013) AOAC (20 th Edition) 971.21: 2016	0.01 to 10.0 mg/kg
		Arsenic	IS 2237, AOAC (20 th Edition)963.21	0.02 to 10 mg/kg
		Copper	IS 2237,AOAC (20 th Edition) 999.11	0.25 to 20 mg/kg
		Selenium	AOAC(20 th Edition) 986.15	0.02 to 10 mg/kg
		Poly Chlorinated Biphenyl(PCBs)		
		2,4,4'-Trichlorobiphenyl PCB No 28	NAL/ INS/ SOP/GC006 Issue. 01, Issue Dated. 01.11.2017, Based on AOAC (20 th Edition) 2007.01, 970.52: by GC-MSMS	10.0 to 100 µg/kg
		2,2',3,4,4',5'- Hexachlorobiphenyl- PCB 138		10.0 to 100 µg/kg
		2,2',4,5,5'- Pentachlorobiphenyl-PCB 101		10.0 to 100 µg/kg
		2,2',3,4,4',5,5'- Heptachlorobiphenyl-PCB 180		10.0 to 100 µg/kg
		2,2',4,4',5,5'- Hexachlorobiphenyl- PCB 153		10.0 to 100 µg/kg
		2,2',5,5'- Tetrachlorobiphenyl- PCB 52		10.0 to 100 µg/kg
		Dyes		
		Malachite Green	NAL/INS/SOP/LCMS010, Issue No:01,Issue Date :	0.5 to 5.0 µg/kg
		Leuco malachite Green	14.03.2017	0.5 to 5.0 µg/kg
		Crystal Violet		0.5 to 5.0 µg/kg
		Leuco-crystal violet		0.5 to 5.0 µg/kg
c.	Fruit and Fruit	Pesticides		

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	products/Vegetables & vegetable products	1-Naphthylacetic acid	NAL/INS/SOP/003 Issue. 02, Issue Date, 14.03.2017 (LC MSMS & GC-MS MS)	10.0 to 200 µg/kg
		2,4-D		10.0 to 200 µg/kg
		4-bromo-2-chlorophenol		10.0 to 100 µg/kg
		4 Chlorophenoxy acetic acid		10.0 to 200 µg/kg
		6-Benzyl adenine		10.0 to 200 µg/kg
		Abamectin		10.0 to 200 µg/kg
		Acephate		10.0 to 200 µg/kg
		Acetamiprid		10.0 to 200 µg/kg
		Alachlor		10.0 to 200 µg/kg
		Aldrin		10.0 to 100 µg/kg
		Dieldrin		10.0 to 100 µg/kg
		Allethrin/Bioallethrin		10.0 to 100 µg/kg
		Ametoctradin		10.0 to 200 µg/kg
		Atrazine		10.0 to 200 µg/kg
		Azadirachtin		10.0 to 200 µg/kg
		Azoxystrobin		10.0 to 200 µg/kg
		Benalaxyl and isomers		10.0 to 200 µg/kg
		Bendiocarb		10 to 100 µg/kg
		Benfuracarb		10 to 200 µg/kg
		Benomyl		10 to 200 µg/kg
		Bifenazate		10 to 200 µg/kg
		Bifenthrin		10 to 100 µg/kg
		Bitertenol		10 to 200 µg/kg
		Bromophos		10 to 200 µg/kg
		Butachlor		10 to 200 µg/kg
		Buprofezin		10 to 200 µg/kg
		Captafol		10 to 100 µg/kg
		Captan		10 to 100 µg/kg
		Carbaryl		10 to 200 µg/kg
		Carbendazim		10 to 200 µg/kg
		Carbofuran		10 to 200 µg/kg
		3-hydroxy-carbofuran		10 to 200 µg/kg
		Carbosulfan	NAL/INS/SOP/003 Issue.	10 to 200 µg/kg

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		Carboxin	02, Issue Date, 14.03.2017 (LC MSMS & GC-MS MS)	10 to 200 µg/kg
		Cartap hydrochloride		10 to 200 µg/kg
		Chlorantraniliprole		10 to 200 µg/kg
		Cis-chlordane		10 to 100 µg/kg
		trans-chlordane		10 to 100 µg/kg
		Chlorfenopyr		10 to 100 µg/kg
		Chlorfenvinphos		10 to 100 µg/kg
		Chlormequat chloride (CCC)		10 to 200 µg/kg
		Chlorothalonil		10 to 100 µg/kg
		Chlorobenzilate		10 to 200 µg/kg
		Chlorpyrifos		10 to 100 µg/kg
		Chlorpyrifos methyl		10 to 100 µg/kg
		Clothianidin		10 to 200 µg/kg
		Cyantraniliprole		10 to 200 µg/kg
		Cyazofamid		10 to 200 µg/kg
		Cyfluthrin 1		10 to 100 µg/kg
		Cyfluthrin 2		10 to 100 µg/kg
		Cyfluthrin 3		10 to 100 µg/kg
		Cyfluthrin 4		10 to 100 µg/kg
		Cymoxanil		10 to 200 µg/kg
		Cypermethrin 1		10 to 200 µg/kg
		Cypermethrin 2		10 to 200 µg/kg
		Cypermethrin 3		10 to 200 µg/kg
		Cypermethrin 4		10 to 200 µg/kg
		Dazomet		10 to 200 µg/kg
		p,p'-DDT		10 to 100 µg/kg
		o,p'-DDT		10 to 100 µg/kg
		p,p'-DDE		10 to 100 µg/kg
		o,p'-DDE		10 to 100 µg/kg
		p,p'-TDE (DDD)		10 to 100 µg/kg
		o,p'-TDE (DDD)		10 to 100 µg/kg
		Deltamethrin		10 to 200 µg/kg
		Diafenthiuron	NAL/INS/SOP/003 Issue.	10 to 200 µg/kg

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		Diazinon	02, Issue Date, 14.03.2017 (LC MSMS & GC-MS MS)	10 to 200 µg/kg
		Dichlorvos		10 to 100 µg/kg
		Dicofol		10 to 100 µg/kg
		Difenoconazole		10 to 200 µg/kg
		Diflubenzuron		10 to 200 µg/kg
		Dimethoate		10 to 200 µg/kg
		Omethoate		10 to 200 µg/kg
		Dimethomorph		10 to 200 µg/kg
		Dinocap		10 to 200 µg/kg
		Dinotefuran		10 to 200 µg/kg
		Diquat		10 to 200 µg/kg
		Dithianon		10 to 200 µg/kg
		Mancozeb		10 to 200 µg/kg
		Maneb		10 to 200 µg/kg
		Propineb		10 to 200 µg/kg
		Thiram		10 to 200 µg/kg
		Zineb		10 to 200 µg/kg
		Ziram		10 to 200 µg/kg
		Metiram		10 to 200 µg/kg
		Diuron		10 to 200 µg/kg
		3,4-dichloroaniline	10 to 200 µg/kg	
		Dodine	10 to 200 µg/kg	
		Edifenphos	10 to 200 µg/kg	
		Emamectin Benzoate	10 to 200 µg/kg	
		alpha-Endosulphan	10 to 100 µg/kg	
		beta-Endosulphan	10 to 100 µg/kg	
		Endosulphan Sulphate	10 to 100 µg/kg	
		Endrin	10 to 100 µg/kg	
		Ethephon	10 to 200 µg/kg	
		Ethion	10 to 100 µg/kg	
		Ethofenprox (Etofenprox)	10 to 100 µg/kg	
		Etrimfos	10 to 200 µg/kg	
		Famoxadone	10 to 200 µg/kg	
		Fenamidone	NAL/INS/SOP/003 Issue. 10 to 200 µg/kg	

Vinay Kumar Tyagi
Convenor

Mallika Gope
Program Manager

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		Fenarimol	02, Issue Date, 14.03.2017 (LC MSMS & GC-MS MS)	10 to 200 µg/kg
		Fenazaquin		10 to 200 µg/kg
		Fenitrothion		10 to 100 µg/kg
		Fenobucarb		10 to 200 µg/kg
		Fenpropathrin		10 to 100 µg/kg
		Fenpyroximate		10 to 200 µg/kg
		Fenthion		10 to 200 µg/kg
		Fenthion-sulfone		10 to 200 µg/kg
		Fenthion-sulphoxide		10 to 200 µg/kg
		Fenvalerate -I		10 to 100 µg/kg
		Fenvalerate -II		10 to 100 µg/kg
		Fenvalerate and Esfenvalerate		10 to 100 µg/kg
		Fipronil		2.5 to 200 µg/kg
		Fipronil sulfone		2.5 to 200 µg/kg
		Flonicamide		10 to 200 µg/kg
		TNFG		10 to 200 µg/kg
		TNFA		10 to 200 µg/kg
		Flubendiamide		10 to 200 µg/kg
		Fluchloralin		10 to 200 µg/kg
		Flufenacate		10 to 200 µg/kg
		Flufenoxuron		10 to 200 µg/kg
		Flufenzine		10 to 200 µg/kg
		Flusilazole		10 to 200 µg/kg
		Fluvalinate-I		10 to 100 µg/kg
		Fluvalinate-II		10 to 200 µg/kg
		Forchlorfenuron (CPPU)		10 to 200 µg/kg
		Formothion		10 to 200 µg/kg
		Fosetyl-Al		10 to 200 µg/kg
		Gibberellic acid		10 to 200 µg/kg
		Glufosinate-ammonium		10 to 200 µg/kg
		MPP		10 to 200 µg/kg
		NAG		10 to 200 µg/kg
		Glyphosate	NAL/INS/SOP/003 Issue.	10 to 200 µg/kg

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		alpha-HCH	02, Issue Date, 14.03.2017 (LC MSMS & GC-MS MS)	10 to 100 µg/kg
		beta-HCH		10 to 100 µg/kg
		Gamma-HCH		10 to 100 µg/kg
		delta-HCH		10 to 100 µg/kg
		Hexachlorbenzene		10 to 200 µg/kg
		Heptachlor		10 to 100 µg/kg
		Heptachlor epoxide		10 to 100 µg/kg
		Hexaconazole		10 to 200 µg/kg
		Hexythiazox		10 to 200 µg/kg
		Homobrassinolide		10 to 200 µg/kg
		Hydrogen Cyanamide		10 to 200 µg/kg
		Imidacloprid		10 to 200 µg/kg
		Indoxacarb		10 to 200 µg/kg
		Iodosulfuron-methyl		10 to 200 µg/kg
		Iprobenphos		10 to 200 µg/kg
		Iprodione		10 to 100 µg/kg
		Iprovalicarb		10 to 200 µg/kg
		Isoprothioline		10 to 200 µg/kg
		Isoproturon		10 to 200 µg/kg
		Kresoxim methyl		10 to 200 µg/kg
		Lambda-cyhalothrin		10 to 100 µg/kg
		Linuron		10 to 200 µg/kg
		Lufenuron		10 to 200 µg/kg
		Malathion		10 to 200 µg/kg
		Malaoxon		10 to 200 µg/kg
		Mandipropamid		10 to 200 µg/kg
		Malic Hydrazide		10 to 200 µg/kg
		Mepiquat Chloride		10 to 200 µg/kg
		Mevinphos		10 to 200 µg/kg
		Metalaxyl		10 to 200 µg/kg
		Metalaxyl-M		10 to 200 µg/kg
		Methamidophos		10 to 200 µg/kg
		Methomyl		10 to 200 µg/kg
		Methyl chloro phenoxy	NAL/INS/SOP/003 Issue.	10 to 200 µg/kg

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		acetic Acid (MCPA)	02, Issue Date, 14.03.2017 (LC MSMS & GC-MS MS)	
		Thiodicarb		10 to 200 µg/kg
		Metasulfuron-methyl		10 to 200 µg/kg
		Methabenzthiazuron		10 to 200 µg/kg
		Metolachlor		10 to 200 µg/kg
		Metribuzin		10 to 200 µg/kg
		Milbemectin A3		10 to 200 µg/kg
		Milbemectin A4		10 to 200 µg/kg
		Monocrotophos		10 to 200 µg/kg
		Myclobutanil		10 to 200 µg/kg
		Novaluron		10 to 200 µg/kg
		Oxadiazon		10 to 100 µg/kg
		Oxycarboxin		10 to 200 µg/kg
		Oxydemeton- methyl		10 to 200 µg/kg
		Demeton-S-methylsulfone		10 to 200 µg/kg
		Oxyfluorfen		10 to 100 µg/kg
		Paclobutrazole		10 to 200 µg/kg
		Paraquit dichloride		10 to 200 µg/kg
		Parathion Methyl		10 to 100 µg/kg
		Paraoxon methyl		10 to 100 µg/kg
		Parathion ethyl		10 to 100 µg/kg
		Penconazole		10 to 200 µg/kg
		Pencycuron		10 to 200 µg/kg
		Pendimethalin		10 to 200 µg/kg
		cis-Permethrin		10 to 100 µg/kg
		trans-Permethrin		10 to 100 µg/kg
		Phenthoate		10 to 200 µg/kg
		Phorate		10 to 100 µg/kg
		Phorate-sulfone		10 to 100 µg/kg
		Phorate-sulfoxide		10 to 100 µg/kg
		Phosalone	10 to 200 µg/kg	
		Phosphamidon	10 to 200 µg/kg	
		Phosmet	10 to 200 µg/kg	
		Pirimiphos-methyl	NAL/INS/SOP/003 Issue. 10 to 100 µg/kg	

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		Profenofos	02, Issue Date, 14.03.2017 (LC MSMS & GC-MS MS)	10 to 200 µg/kg
		Propamocarb		10 to 200 µg/kg
		Propanil		10 to 100 µg/kg
		Propagite		10 to 200 µg/kg
		Propetamphos		10 to 100 µg/kg
		Propiconazole		10 to 200 µg/kg
		Propoxur		10 to 200 µg/kg
		Pyraclostrobin		10 to 200 µg/kg
		Pyrethrins –I		10 to 200 µg/kg
		Pyrethrins –II		10 to 200 µg/kg
		Pyridaben		10 to 200 µg/kg
		Pyriproxyfen		10 to 100 µg/kg
		Quinalphos		10 to 200 µg/kg
		Simazine		10 to 200 µg/kg
		Spinosad A		10 to 200 µg/kg
		Spinosad D		10 to 200 µg/kg
		Spirodiclofen		10 to 200 µg/kg
		Spiromesifen		10 to 200 µg/kg
		Sulphur		10 to 200 µg/kg
		tau- Fluvalinate		10 to 200 µg/kg
		Tebuconazole		10 to 200 µg/kg
		Temephos		10 to 200 µg/kg
		Tetraconazole		10 to 100 µg/kg
		Thiacloprid		10 to 200 µg/kg
		Thiamethoxam		10 to 200 µg/kg
		Thiobencarb		10 to 200 µg/kg
		Thiometon		10 to 100 µg/kg
		Thiophanate-methyl		10 to 200 µg/kg
		Transfluthrin		10 to 100 µg/kg
		Triadimefon		10 to 200 µg/kg
		Triadimenol		10 to 200 µg/kg
		Triazophos		10 to 200 µg/kg
		Trichlorfon		10 to 200 µg/kg
		Tricyclazole	NAL/INS/SOP/003 Issue.	10 to 200 µg/kg

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		Tridemorph	02, Issue Date, 14.03.2017 (LC MSMS & GC-MS MS)	10 to 200 µg/kg
		Trifloxystrobin		10 to 200 µg/kg
		Trifluralin		10 to 100 µg/kg
		Triallate		10 to 200 µg/kg
		Uracil		10 to 200 µg/kg
		Vinclozolin		10 to 200 µg/kg
		Pyrimethanil		10 to 100 µg/kg
		Imazalil		10 to 500 µg/kg
		Fludioxonil		10 to 500 µg/kg
		Thiabendazole		10 to 500 µg/kg
		Carpropamide		10 to 500 µg/kg
		Fluopicolide		10 to 500 µg/kg
		Fluopyram		10 to 500 µg/kg
		Fluxapyroxad		10 to 500 µg/kg
		Meptyldinocap		10 to 500 µg/kg
		Metrafenone		10 to 500 µg/kg
		Picoxystrobin		10 to 500 µg/kg
		Triforine		10 to 500 µg/kg
		Validamycin		10 to 500 µg/kg
		Chlorimuron ethyl		10 to 500 µg/kg
		Dimethachlor		10 to 500 µg/kg
		Imazethapyr		10 to 500 µg/kg
		Quizalofop		10 to 500 µg/kg
		Pyridalyl		10 to 500 µg/kg
		Spirotetramat and its metabolites		10 to 500 µg/kg
		Etoxazole		10 to 500 µg/kg
		Tebufenozide		10 to 500 µg/kg
		Thiocyclam		10 to 500 µg/kg
		Tolfenpyrad		10 to 500 µg/kg
		Nereistoxin		10 to 500 µg/kg
		Chlorpropham		10 to 500 µg/kg
		Pymetrozine		10 to 200 µg/kg
		Nitenpyram	NAL/INS/SOP/003 Issue.	10 to 200 µg/kg

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		Fluazifop	02, Issue Date, 14.03.2017	10 to 200 µg/kg
		Epoxiconazole	(LC MSMS & GC-MS MS)	10 to 200 µg/kg
		Fenhexamid		10 to 200 µg/kg
		Trace metal elements		
		Lead as Pb	AOAC(20 th Edition)999.11	0.01 to 0.1 mg/kg
		Cadmium as Cd		0.01 to 0.1 mg/kg
d.	Milk & dairy products	Antibiotics		
		Chloramphenicol	NAL/INS/SOP/LCMS015, Issue No:1, Issue Date : 14.03.2017	0.075 to 0.75 µg/kg
		Florfenicol		0.075 to 0.75 µg/kg
		Nitrofurans Metabolites		
		Amino-oxazolidinone(AOZ)	NAL/INS/SOP/LCMS011, Issue No:1, Issue Date : 14.03.2017	0.5 to 3 µg/kg
		Semicarbazide (SEM)		0.5 to 3 µg/kg
		Aminohydantoin (AHD)		0.5 to 3 µg/kg
		3-Amino-5-morpholinomethyl - 2-oxazolidinone (AMOZ)		0.5 to 3 µg/kg
		Sulfonamides		
		Sulfadimidine	NAL/INS/SOP/LCMS012, Issue No:1, Issue Date : 14.03.2017	10 to 500 µg/kg
		Sulfadiazine		10 to 500 µg/kg
		Sulfadoxine		10 to 500 µg/kg
		Sulfadimethoxine		10 to 500 µg/kg
		Sulfamethazine		10 to 500 µg/kg
		Sulfamirazine		10 to 500 µg/kg
		Sulfanilamide		10 to 500 µg/kg
		Sulfamethoxypyridazine		10 to 500 µg/kg
		Sulfamethiazole		10 to 500 µg/kg
		Sulfathiazole		10 to 500 µg/kg
		Enrofloxacin	NAL/INS/SOP/LCMS013, Issue No:1, Issue Date : 14.03.2017	10 to 500 µg/kg
		Ciprofloxacin		10 to 500 µg/kg
		Metronidazole		0.5 to 3.0 µg/kg
		Ronidazole		0.5 to 3.0 µg/kg
		Streptomycin	NAL/INS/SOP/LCMS017,	10 to 500 µg/kg

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		Gentamicin	Issue No:1, Issue Date:14.03.2017	10 to 500 µg/kg
		Kanamycin		10 to 500 µg/kg
		Neomycin		500 to 5000 µg/kg
		Spectinomycin		10 to 500 µg/kg
		Erythromycin		10 to 500 µg/kg
		Spiramycin		10 to 500 µg/kg
		Tylosin	NAL/INS/SOP/LCMS018, Issue No:1, Issue Date : 14.03.2017	10 to 500 µg/kg
		Tilmicosin		10 to 500 µg/kg
		Tetracyclines		
		Tetracycline	NAL/INS/SOP/LCMS016, Issue No:1, Issue Date : 14.03.2017	10 to 500 µg/kg
		4-epi-Tetracycline		10 to 500 µg/kg
		Oxytetracycline		10 to 500 µg/kg
		4-epi-Oxytetracycline		10 to 500 µg/kg
		Chlorotetracycline		10 to 500 µg/kg
		4-epi-Chlorotetracycline		10 to 500 µg/kg
		Doxycycline		10 to 500 µg/kg
		Anthelmintics		
		albendazole sulphoxide	NAL/INS/SOP/LCMS014, Issue No:1, Issue Date : 14.03.2017	25 to 300 µg/kg
		albendazole sulphone		25 to 300 µg/kg
		albendazole 2-amino sulphone		25 to 300 µg/kg
		Fenbendazole		5 to 300 µg/kg
		Ivermectin		5 to 300 µg/kg
		Morantel		15 to 300 µg/kg
		Pesticides Residue		
		Abamectin	NAL/INS/SOP /003 Issue. 02, Issue Date, 14.03.2017(LC-MSMS)	10 to 500 µg/kg
		Emamectin Benzoate		10 to 500 µg/kg
		Organochlorine Pesticides		
		Aldrin	NAL/INS/SOP /003 Issue. 02, Issue Date, 14.03.2017 (LC-MS MS& GC MSMS)	10 to 500 µg/kg
		Cis-chlordane		10 to 500 µg/kg
		Dieldrin		10 to 500 µg/kg
		Endosulphan		10 to 500 µg/kg
		Gamma-HCH (Lindane)		10 to 500 µg/kg

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		Heptachlor		10 to 500 µg/kg
		HCH-Alfa		10 to 500 µg/kg
		HCH-Beta		10 to 500 µg/kg
		HCH-Delta		10 to 500 µg/kg
		o,p-DDD		10 to 500 µg/kg
		o,p-DDE		10 to 500 µg/kg
		o,p-DDT		10 to 500 µg/kg
		p,p-DDD		10 to 500 µg/kg
		p,p-DDE		10 to 500 µg/kg
		p,p-DDT		10 to 500 µg/kg
		Trans-chlordane		10 to 500 µg/kg
		Organo Phosphorous Pesticides		
		Chlorfenvinphos	NAL/INS/SOP /003 Issue. 02, Issue Date, 14.03.2017 (LC-MS MS& GC MSMS)	10 to 500 µg/kg
		Chlorpyrifos		10 to 500 µg/kg
		Cypermethrin		10 to 500 µg/kg
		Diazinon		10 to 500 µg/kg
		Ethion		10 to 500 µg/kg
		Fenitrothion		10 to 500 µg/kg
		Fenvalerate		10 to 500 µg/kg
		Parathion Methyl		10 to 500 µg/kg
		Pirimiphos-methyl		10 to 500 µg/kg
		Phorate		10 to 500 µg/kg
		Ethoxychlor		10 to 500 µg/kg
		Carbamates		
		Carbofurans	NAL/INS/SOP /003 Issue. 02, Issue Date, 14.03.2017 (LC-MS MS& GC MSMS)	10 to 500 µg/kg
		Fenthion		10 to 500 µg/kg
		Fenthion-sulfone		10 to 500 µg/kg
		Fenthion-sulphoxide		10 to 500 µg/kg
		Malathion		10 to 500 µg/kg
		Malaoxon		10 to 500 µg/kg
		Monocrotophos		10 to 500 µg/kg
		Phenthoate		10 to 500 µg/kg
		Phorate-sulfone		10 to 500 µg/kg

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		Phorate-sulfoxide		10 to 500 µg/kg
		Phosalone		10 to 500 µg/kg
		2,4-D		10 to 500 µg/kg
		Carbendazim		10 to 500 µg/kg
		Benomyl		10 to 500 µg/kg
		Edifenphos		10 to 500 µg/kg
		Mycotoxins		
		Aflatoxin M1	AOAC (20 th Edition) 2000.8: Chapter 49	0.2 to 10 µg/kg
		Trace metal elements		
		Lead	AOAC (20 th Edition) 999.11	0.01 to 10 mg/kg
		Cadmium		0.01 to 10 mg/kg
e.	Nut and Nut Products	Chlorothalonil	NAL/INS/SOP /003 Issue. 02, Issue Date, 14.03.2017 (LC-MS MS& GC MSMS)	10 to 500 µg/kg
		Permethrin I		10 to 500 µg/kg
		Permethrin II		10 to 500 µg/kg
		Pyrethrin I		10 to 500 µg/kg
		Pyrethrin II		10 to 500 µg/kg
		Indoxacarb		10 to 500 µg/kg
		Prothioconazole		10 to 500 µg/kg
		Tebuconazole		10 to 500 µg/kg
		Trifloxystrobin		10 to 500 µg/kg
		Metalaxyl		10 to 500 µg/kg
		Azoxystrobin		10 to 500 µg/kg
		Carbendazim		10 to 500 µg/kg
		Aldicarb		10 to 500 µg/kg
		Imidacloprid		10 to 500 µg/kg
		Clethodim		10 to 500 µg/kg
		Cypermethrin		10 to 500 µg/kg
		Disulfoton		10 to 500 µg/kg
		Phenamiphos		10 to 500 µg/kg
		Oxamyl		10 to 500 µg/kg
		Propargite		10 to 500 µg/kg
		Quintozene		10 to 500 µg/kg
f.	Cereals, pulses &	Fenoxaprop-P-ethyl	NAL/INS/SOP /003 Issue	10 to 500 µg/kg

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	cereal products	Anilophos	02, Issue Date, 14.03.2017 (LC-MS MS& GC MSMS)	10 to 500 µg/kg
		Chlorimuron-ethyl		10 to 500 µg/kg
		Clodinafop-propargyl		10 to 500 µg/kg
		Clomazone		10 to 500 µg/kg
		Cyhalofop-butyl		10 to 500 µg/kg
		Diclofop-methyl		10 to 500 µg/kg
		Ethoxysulfuron		10 to 500 µg/kg
		Paraquat		10 to 500 µg/kg
		Pretilachlor		10 to 500 µg/kg
		Pyrazosulfuron ethyl		10 to 500 µg/kg
		Sulfosulfuron		10 to 500 µg/kg
		Quizalofop-ethyl		10 to 500 µg/kg
		Cinosulfuran		10 to 500 µg/kg
		Chlorimuron-ethyl		10 to 500 µg/kg
		Bensulfuron methyl		10 to 500 µg/kg
		Bentazone – sodium		10 to 500 µg/kg
		Molinate		10 to 500 µg/kg
		Cycloxydim		10 to 500 µg/kg
		Carpropamid		10 to 500 µg/kg
		Triflumizole		10 to 500 µg/kg
		Fludioxonil		10 to 500 µg/kg
		Flutolanil		10 to 500 µg/kg
		Oxadiargyl		10 to 500 µg/kg
		Cyhalothrin		10 to 500 µg/kg
		1-Naphthylacetic acid		10 to 200 µg/kg
		2,4-D	10 to 200 µg/kg	
		4-bromo-2-chlorophenol	10 to 200 µg/kg	
		4 Chlorophenoxy acetic acid	10 to 200 µg/kg	
		6-Benzyl adenine	10 to 200 µg/kg	
		Abamectin	10 to 200 µg/kg	
		Acephate	10 to 200 µg/kg	
		Acetamiprid	10 to 200 µg/kg	
		Alachlor	NAL/INS/SOP /003 Issue.	10 to 200 µg/kg

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		Aldrin	02, Issue Date, 14.03.2017 (LC-MS MS& GC MSMS)	10 to 200 µg/kg
		Dieldrin		10 to 200 µg/kg
		Allethrin/Bioallethrin		10 to 200 µg/kg
		Ametoctradin		10 to 200 µg/kg
		Atrazine		10 to 200 µg/kg
		Azadirachtin		10 to 200 µg/kg
		Azoxystrobin		10 to 200 µg/kg
		Benalaxyl and isomers		10 to 200 µg/kg
		Bendiocarb		10 to 200 µg/kg
		Benfuracarb		10 to 200 µg/kg
		Benomyl		10 to 200 µg/kg
		Bifenazate		10 to 200 µg/kg
		Bifenthrin		10 to 200 µg/kg
		Bitertenol		10 to 200 µg/kg
		Bromophos		10 to 200 µg/kg
		Butachlor		10 to 200 µg/kg
		Buprofezin		10 to 200 µg/kg
		Captafol		10 to 200 µg/kg
		Captan		10 to 200 µg/kg
		Carbaryl		10 to 200 µg/kg
		Carbendazim		10 to 200 µg/kg
		Carbofuran		10 to 200 µg/kg
		3-hydroxy-carbofuran		10 to 200 µg/kg
		Carbosulfan		10 to 200 µg/kg
		Carboxin		10 to 200 µg/kg
		Cartap hydrochloride		10 to 200 µg/kg
		Chlorantraniliprole		10 to 200 µg/kg
		Cis-chlordane		10 to 200 µg/kg
		trans-chlordane		10 to 200 µg/kg
		Chlorfenopyr		10 to 200 µg/kg
		Chlorfenvinphos		10 to 200 µg/kg
		Chlormequat chloride (CCC)		10 to 200 µg/kg
		Chlorothalonil	NAL/INS/SOP /003 Issue.	10 to 200 µg/kg

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		Chlorobenzilate	02, Issue Date, 14.03.2017 (LC-MS MS& GC MSMS)	10 to 200 µg/kg
		Chlorpyrifos		10 to 200 µg/kg
		Chlorpyrifos methyl		10 to 200 µg/kg
		Clothianidin		10 to 200 µg/kg
		Cyantraniliprole		10 to 200 µg/kg
		Cyazofamid		10 to 200 µg/kg
		Cyfluthrin 1		10 to 200 µg/kg
		Cyfluthrin 2		10 to 200 µg/kg
		Cyfluthrin 3		10 to 200 µg/kg
		Cyfluthrin 4		10 to 200 µg/kg
		Cymoxanil		10 to 200 µg/kg
		Cypermethrin 1		10 to 200 µg/kg
		Cypermethrin 2		10 to 200 µg/kg
		Cypermethrin 3		10 to 200 µg/kg
		Cypermethrin 4		10 to 200 µg/kg
		Dazomet		10 to 200 µg/kg
		p,p'-DDT		10 to 200 µg/kg
		o,p'-DDT		10 to 200 µg/kg
		p,p'-DDE		10 to 200 µg/kg
		p,p'-TDE (DDD)		10 to 200 µg/kg
		Deltamethrin		10 to 200 µg/kg
		Diafenthiuron		10 to 200 µg/kg
		Diazinon		10 to 200 µg/kg
		Dichlorvos		10 to 200 µg/kg
		Dicofol		10 to 200 µg/kg
		Difenoconazole		10 to 200 µg/kg
		Diflubenzuron		10 to 200 µg/kg
		Dimethoate		10 to 200 µg/kg
		Omethoate		10 to 200 µg/kg
		Dimethomorph		10 to 200 µg/kg
		Dinocap		10 to 200 µg/kg
		Dinotefuran		10 to 200 µg/kg
		Diquat		10 to 200 µg/kg
		Dithianon	NAL/INS/SOP /003 Issue.	10 to 200 µg/kg

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		Mancozeb	02, Issue Date, 14.03.2017 (LC-MS MS& GC MSMS)	10 to 200 µg/kg
		Maneb		10 to 200 µg/kg
		Propineb		10 to 200 µg/kg
		Thiram		10 to 200 µg/kg
		Zineb		10 to 200 µg/kg
		Ziram		10 to 200 µg/kg
		Metiram		10 to 200 µg/kg
		Diuron		10 to 200 µg/kg
		3,4-dichloroaniline		10 to 200 µg/kg
		Dodine		10 to 200 µg/kg
		Edifenphos		10 to 200 µg/kg
		Emamectin Benzoate		10 to 200 µg/kg
		alpha-Endosulphan		10 to 200 µg/kg
		beta-Endosulphan		10 to 200 µg/kg
		Endosulphan Sulphate		10 to 200 µg/kg
		Endrin		10 to 200 µg/kg
		Ethephon		10 to 200 µg/kg
		Ethion		10 to 200 µg/kg
		Ethofenprox (Etofenprox)		10 to 200 µg/kg
		Etrimfos		10 to 200 µg/kg
		Famoxadone		10 to 200 µg/kg
		Fenamidone		10 to 200 µg/kg
		Fenarimol		10 to 200 µg/kg
		Fenazaquin		10 to 200 µg/kg
		Fenitrothion		10 to 200 µg/kg
		Fenobucarb		10 to 200 µg/kg
		Fenpropathrin		10 to 200 µg/kg
		Fenpyroximate		10 to 200 µg/kg
		Fenthion		10 to 200 µg/kg
		Fenthion-sulfone		10 to 200 µg/kg
		Fenthion-sulphoxide		10 to 200 µg/kg
		Fenvalerate		10 to 200 µg/kg
		Fenvalerate and	NAL/INS/SOP /003 Issue.	10 to 200 µg/kg

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		Esfenvalerate	02, Issue Date, 14.03.2017 (LC-MS MS& GC MSMS)	
		Fipronil		10 to 200 µg/kg
		Fipronil sulfone		10 to 200 µg/kg
		Flonicamide		10 to 200 µg/kg
		TNFG		10 to 200 µg/kg
		TNFA		10 to 200 µg/kg
		Flubendiamide		10 to 200 µg/kg
		Fluchloralin		10 to 200 µg/kg
		Flufenacate		10 to 200 µg/kg
		Flufenoxuron		10 to 200 µg/kg
		Flufenzine		10 to 200 µg/kg
		Flusilazole		10 to 200 µg/kg
		Fluvalinate		10 to 200 µg/kg
		Forchlorfenuron (CPPU)		10 to 200 µg/kg
		Formothion		10 to 200 µg/kg
		Fosetyl-Al		10 to 200 µg/kg
		Gibberellic acid		10 to 200 µg/kg
		Glufosinate-ammonium		10 to 200 µg/kg
		MPP		10 to 200 µg/kg
		NAG		10 to 200 µg/kg
		Glyphosate		10 to 200 µg/kg
		alpha-HCH		10 to 200 µg/kg
		beta-HCH		10 to 200 µg/kg
		Gamma-HCH		10 to 200 µg/kg
		delta-HCH		10 to 200 µg/kg
		Hexachlorbenzene		10 to 200 µg/kg
		Heptachlor	10 to 200 µg/kg	
		Heptachlor epoxide	10 to 200 µg/kg	
		Hexaconazole	10 to 200 µg/kg	
		Hexythiazox	10 to 200 µg/kg	
		Homobrassinolide	10 to 200 µg/kg	
		Hydrogen Cyanamide	10 to 200 µg/kg	
		Imidacloprid	10 to 200 µg/kg	
		Indoxacarb	NAL/INS/SOP /003 Issue.	10 to 200 µg/kg

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		Iodosulfuron-methyl	02, Issue Date, 14.03.2017 (LC-MS MS& GC MSMS)	10 to 200 µg/kg
		Iprobenphos		10 to 200 µg/kg
		Iprodione		10 to 200 µg/kg
		Iprovalicarb		10 to 200 µg/kg
		Isoprothioline		10 to 200 µg/kg
		Isoproturon		10 to 200 µg/kg
		Kresoxim methyl		10 to 200 µg/kg
		Lambda-cyhalothrin		10 to 200 µg/kg
		Linuron		10 to 200 µg/kg
		Lufenuron		10 to 200 µg/kg
		Malathion		10 to 200 µg/kg
		Malaoxon		10 to 200 µg/kg
		Mandipropamid		10 to 200 µg/kg
		Malic Hydrazide		10 to 200 µg/kg
		Mepiquat Chloride		10 to 200 µg/kg
		Mevinphos		10 to 200 µg/kg
		Metalaxyl		10 to 200 µg/kg
		Metalaxyl-M		10 to 200 µg/kg
		Methamidophos		10 to 200 µg/kg
		Methomyl		10 to 200 µg/kg
		Methyl chloro phenoxy acetic Acid (MCPA)		10 to 200 µg/kg
		Thiodicarb		10 to 200 µg/kg
		Metasulfuron-methyl		10 to 200 µg/kg
		Methabenzthiazuron		10 to 200 µg/kg
		Metolachlor		10 to 200 µg/kg
		Metribuzin		10 to 200 µg/kg
		Milbemectin A3		10 to 200 µg/kg
		Milbemectin A4		10 to 200 µg/kg
		Monocrotophos		10 to 200 µg/kg
		Myclobutanil		10 to 200 µg/kg
		Novaluron		10 to 200 µg/kg
		Oxadiazon		10 to 200 µg/kg
		Oxycarboxin	NAL/INS/SOP /003 Issue.	10 to 200 µg/kg

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Oxydemeton- methyl	02, Issue Date, 14.03.2017 (LC-MS MS& GC MSMS)	10 to 200 µg/kg
		Demeton-S-methylsulfone		10 to 200 µg/kg
		Oxyfluorfen		10 to 200 µg/kg
		Paclobutrazole		10 to 200 µg/kg
		Paraquit dichloride		10 to 200 µg/kg
		Parathion Methyl		10 to 200 µg/kg
		Paraoxon methyl		10 to 200 µg/kg
		Parathion ethyl		10 to 200 µg/kg
		Penconazole		10 to 200 µg/kg
		Pencycuron		10 to 200 µg/kg
		Pendimethalin		10 to 200 µg/kg
		cis-Permethrin		10 to 200 µg/kg
		trans-Permethrin		10 to 200 µg/kg
		Phenthoate		10 to 200 µg/kg
		Phorate		10 to 200 µg/kg
		Phorate-sulfone		10 to 200 µg/kg
		Phorate-sulfoxide		10 to 200 µg/kg
		Phosalone		10 to 200 µg/kg
		Phosphamidon		10 to 200 µg/kg
		Phosmet		10 to 200 µg/kg
		Pirimiphos-methyl		10 to 200 µg/kg
		Profenofos		10 to 200 µg/kg
		Propamocarb		10 to 200 µg/kg
		Propanil		10 to 200 µg/kg
		Propagite		10 to 200 µg/kg
		Propetamphos		10 to 200 µg/kg
		Propiconazole		10 to 200 µg/kg
		Propoxur		10 to 200 µg/kg
		Pyraclostrobin		10 to 200 µg/kg
		Pyrethrins –I		10 to 200 µg/kg
		Pyrethrins –II		10 to 200 µg/kg
		Pyridaben		10 to 200 µg/kg
		Pyriproxyfen		10 to 200 µg/kg
		Quinalphos	NAL/INS/SOP /003 Issue.	10 to 200 µg/kg

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Simazine	02, Issue Date, 14.03.2017 (LC-MS MS& GC MSMS)	10 to 200 µg/kg
		Spinosad A		10 to 200 µg/kg
		Spinosad D		10 to 200 µg/kg
		Spirodiclofen		10 to 200 µg/kg
		Spiromesifen		10 to 200 µg/kg
		Sulphur		10 to 200 µg/kg
		tau- Fluvalinate		10 to 200 µg/kg
		Tebuconazole		10 to 200 µg/kg
		Temephos		10 to 200 µg/kg
		Tetraconazole		10 to 200 µg/kg
		Thiacloprid		10 to 200 µg/kg
		Thiamethoxam		10 to 200 µg/kg
		Thiobencarb		10 to 200 µg/kg
		Thiometon		10 to 200 µg/kg
		Thiophanate-methyl		10 to 200 µg/kg
		Transfluthrin		10 to 200 µg/kg
		Triadimefon		10 to 200 µg/kg
		Triadimenol		10 to 200 µg/kg
		Triazophos		10 to 200 µg/kg
		Trichlorfon		10 to 200 µg/kg
		Tricyclazole	10 to 200 µg/kg	
		Tridemorph	10 to 200 µg/kg	
		Trifloxystrobin	10 to 200 µg/kg	
		Trifluralin	10 to 200 µg/kg	
		Triallate	10 to 200 µg/kg	
		Uracil	10 to 200 µg/kg	
		Vinclozolin	10 to 200 µg/kg	
		Copperoxy Chloride	10 to 200 µg/kg	
g.	Spice & Spice products	BHC	NAL/INS/SOP /003 Issue. 02, Issue Date, 14.03.2017 (LC-MS MS& GC MSMS)	10 to 500 µg/kg
		Ethion		10 to 500 µg/kg
		Dicofol		10 to 500 µg/kg
		Endosulphan		10 to 500 µg/kg
		p,p'-DDT		10 to 500 µg/kg
		o,p'-DDT		10 to 500 µg/kg

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		Heptachlor		10 to 500 µg/kg
		Aldrin		10 to 500 µg/kg
		Dieldrin		10 to 500 µg/kg
		Endrin		10 to 500 µg/kg
		Diendrin		10 to 500 µg/kg
		Chlorothalonil		10 to 500 µg/kg
		Phosmet	NAL/INS/SOP /003 Issue. 02, Issue Date, 14.03.2017 (LC-MS MS& GC MSMS)	10 to 500 µg/kg
		Chlorpyrifos		10 to 500 µg/kg
		Parathion Methyl		10 to 500 µg/kg
		Phorate		10 to 500 µg/kg
		Parathion		10 to 500 µg/kg
		Primiphos-methyl		10 to 500 µg/kg
		Bifenthrin		10 to 500 µg/kg
		Cypermethrin		10 to 500 µg/kg
		Fenvalerate		10 to 500 µg/kg
		Fenitrothion		10 to 500 µg/kg
		Chlorfenvinphos		10 to 500 µg/kg
		Azinphos ethyl		10 to 500 µg/kg
		Cyhalothrin (includes lambda cyhalothrin)		10 to 500 µg/kg
		Cypermethrin		10 to 500 µg/kg
		Carbaryl		10 to 500 µg/kg
		Carbofuran		10 to 500 µg/kg
		Methomyl		10 to 500 µg/kg
		Aldicarb		10 to 500 µg/kg
		Dithiocarbamates Mancozeb, Maneb, Propineb, Metiram, Thiram, Zineb and Ziram collectively estimated as CS2)		10 to 500 µg/kg
		Dimethoate		10 to 500 µg/kg
		Etrimfos		10 to 500 µg/kg
		Quinalphos		10 to 500 µg/kg

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Monocrotophos		10 to 500 µg/kg
		Malathion		10 to 500 µg/kg
		Phenthoate		10 to 500 µg/kg
		Phosalone		10 to 500 µg/kg
		Profenofos		10 to 500 µg/kg
		Trichlorfon		10 to 500 µg/kg
		Methoate		10 to 500 µg/kg
		Alachlor		10 to 500 µg/kg
		Dithianon	NAL/INS/SOP /003 Issue. 02, Issue Date, 14.03.2017 (LC-MS MS& GC MSMS)	10 to 500 µg/kg
		Fosetyl-Al		10 to 500 µg/kg
		Iprodion		10 to 500 µg/kg
		Iprobenphos		10 to 500 µg/kg
		Triazophos		10 to 500 µg/kg
h.	Tea & Coffee Products	Endosulfan	NAL/INS/SOP/003 Issue. 02, Issue Date, 14.03.2017 (LC-MS MS& GC MSMS)	10 to 500 µg/kg
		Aldrin		10 to 500 µg/kg
		Dieldrin		10 to 500 µg/kg
		o,p'-DDE		10 to 500 µg/kg
		p,p'-DDE		10 to 500 µg/kg
		o,p'-DDT		10 to 500 µg/kg
		p,p'-DDT		10 to 500 µg/kg
		o,p'-DDD		10 to 500 µg/kg
		p,p'-DDD		10 to 500 µg/kg
		Dicofol		10 to 500 µg/kg
		Endrin		10 to 500 µg/kg
		Heptachlor isomer		10 to 500 µg/kg
		Hexachlor benzene		10 to 500 µg/kg
		Hexachloro cyclo hexane Isomer		10 to 500 µg/kg
		Ethion		10 to 500 µg/kg
		Chlorpyrifos		10 to 500 µg/kg
		Cyfluthrin Isomers		10 to 500 µg/kg
	Cypermethrin 1,2,3,4		10 to 500 µg/kg	
	Deltamethrin		10 to 500 µg/kg	
	Fenitrothion	NAL/INS/SOP/003 Issue.	10 to 500 µg/kg	

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		Fenvalerate	02, Issue Date, 14.03.2017 (LC-MS MS& GC MSMS)	10 to 500 µg/kg
		Fenprothrin		10 to 500 µg/kg
		Lambda-cyhalothrin		10 to 500 µg/kg
		Disulfoton		10 to 500 µg/kg
		Permethrin I,II		10 to 500 µg/kg
		Lindane		10 to 500 µg/kg
		Phorate		10 to 500 µg/kg
		Carbaryl		10 to 500 µg/kg
		Carbofuran		10 to 500 µg/kg
		Carbosulfan		10 to 500 µg/kg
		Propineb		10 to 500 µg/kg
		Thiram		10 to 500 µg/kg
		Ziram		10 to 500 µg/kg
		Aldicarb		10 to 500 µg/kg
		Cartap		10 to 500 µg/kg
		Mancozeb		10 to 500 µg/kg
		Ethephon		10 to 500 µg/kg
		Flufenzine		10 to 500 µg/kg
		Bifenthrin		10 to 500 µg/kg
		Acephate		10 to 500 µg/kg
		Azadiractin	10 to 500 µg/kg	
		Dimethoate	10 to 500 µg/kg	
		Fenazaquin	10 to 500 µg/kg	
		Malathion	10 to 500 µg/kg	
		Monocrotophos	10 to 500 µg/kg	
		Oxydemeton-methyl	10 to 500 µg/kg	
		Phosalone	10 to 500 µg/kg	
		Profenofos	10 to 500 µg/kg	
		Quinalphos	10 to 500 µg/kg	
		Indoxacarb	10 to 500 µg/kg	
		Methidathion	10 to 500 µg/kg	
		Haloxypop	10 to 500 µg/kg	
		2,4-D	10 to 500 µg/kg	
		Alachlor	NAL/INS/SOP /003 Issue.	10 to 500 µg/kg

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		Diuron	02, Issue Date, 14.03.2017 (LC-MS MS& GC MSMS)	10 to 500 µg/kg
		Glyphosate		10 to 500 µg/kg
		Oxyflurofen		10 to 500 µg/kg
		Paraquat		10 to 500 µg/kg
		Simazine-I		10 to 500 µg/kg
		Simazine-II		10 to 500 µg/kg
		Glufosinate Ammonium		10 to 500 µg/kg
		Diquat		10 to 500 µg/kg
		Saflufenacil		10 to 500 µg/kg
		Bitertanol		10 to 500 µg/kg
		Carbendazim		10 to 500 µg/kg
		Chlorothalonil		10 to 500 µg/kg
		Hexaconazole		10 to 500 µg/kg
		Propiconazole		10 to 500 µg/kg
		Tebuconazole		10 to 500 µg/kg
		Tridemorph		10 to 500 µg/kg
		Gibberellic acid		10 to 500 µg/kg
		Azoxystrobin		10 to 500 µg/kg
		Cyproconazole		10 to 500 µg/kg
		Boscalid		10 to 500 µg/kg
		Flutriafol	10 to 500 µg/kg	
		Pyraclostrobin	10 to 500 µg/kg	
		Triadimefon	10 to 500 µg/kg	
		Triadimenol	10 to 500 µg/kg	
		Acetamiprid	10 to 500 µg/kg	
		Clothianidin	10 to 500 µg/kg	
		Diazinon	10 to 500 µg/kg	
		Dichlorvos	10 to 500 µg/kg	
		Diflubenzuron	10 to 500 µg/kg	
		Flufenoxuron	10 to 500 µg/kg	
		Imidacloprid	10 to 500 µg/kg	
		Milbemectin (A3,A4)	10 to 500 µg/kg	
		Spiromesifen	10 to 500 µg/kg	
		Thiacloprid	NAL/INS/SOP /003 Issue.	10 to 500 µg/kg

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Thiamethoxam	02, Issue Date, 14.03.2017 (LC-MS MS& GC MSMS)	10 to 500 µg/kg
		Triazophos		10 to 500 µg/kg
		Flubendamide		10 to 500 µg/kg
		Buprofezin		10 to 500 µg/kg
		Chlorantraniliprole		10 to 500 µg/kg
		Cyantraniliprole		10 to 500 µg/kg
		Spirodiclofen		10 to 500 µg/kg
		Terbufos		10 to 500 µg/kg
		Bifenazate		10 to 500 µg/kg
		Etoxazole		10 to 500 µg/kg
		Hexythiazox		10 to 500 µg/kg
		Propargite		10 to 500 µg/kg
		Clofentezine		10 to 500 µg/kg
		Aldrin		10 to 500 µg/kg
		Chlordane		10 to 500 µg/kg
		Dieldrin		10 to 500 µg/kg
		Endosulphan alpha		10 to 500 µg/kg
		Endosulphan Beta		10 to 500 µg/kg
		Endosulphan Sulphate		10 to 500 µg/kg
		Heptachlor		10 to 500 µg/kg
		HCH-α	10 to 500 µg/kg	
		HCH-β	10 to 500 µg/kg	
		HCH-γ	10 to 500 µg/kg	
		HCH-delta	10 to 500 µg/kg	
		o,p- DDT	10 to 500 µg/kg	
		o,p-DDD	10 to 500 µg/kg	
		o,p-DDE	10 to 500 µg/kg	
		p,p-DDT	10 to 500 µg/kg	
		p,p-DDD	10 to 500 µg/kg	
		p,p-DDE	10 to 500 µg/kg	
		Organophosphorus		

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Pesticides		
		Chlorfenvinphos	NAL/INS/SOP /003 Issue. 02, Issue Date, 14.03.2017 (LC-MS MS& GC MSMS)	10 to 500 µg/kg
		Chlorpyriphos		10 to 500 µg/kg
		Cypermethrin I,II,III,IV		10 to 500 µg/kg
		Ethion		5 to 200 µg/kg
		Fenitrothion		10 to 500 µg/kg
		Lambda-cyhalothrin		10 to 500 µg/kg
		Phorate		5 to 200 µg/kg
		Pirimiphos-methyl		10 to 200 µg/kg
		Carbofuran		5 to 200 µg/kg
		Thiodicarb		10 to 500 µg/kg
		Metiram		10 to 500 µg/kg
		Fenpropathrin		10 to 500 µg/kg
		Fluvalinate		10 to 500 µg/kg
		Fenthion		5 to 200 µg/kg
		Monocrotophos		5 to 200 µg/kg
		Phenthoate		5 to 200 µg/kg
		Phosalone		5 to 200 µg/kg
		Triazophos		5 to 200 µg/kg
		Trichlorfon		5 to 200 µg/kg
		Profenofos		5 to 200 µg/kg
		Acetamiprid	10 to 200 µg/kg	
		Imidacloprid	5 to 200 µg/kg	
		Novaluron	5 to 200 µg/kg	
		Indoxacarb	10 to 500 µg/kg	
		Spinosad A,D	10 to 500 µg/kg	
		Thiacloprid	5 to 200 µg/kg	
		Fenvalerate	10 to 500 µg/kg	
		2,4-D	10 to 200 µg/kg	
		Metolachlor	10 to 200 µg/kg	
		Metribuzin	5 to 200 µg/kg	
		Oxyfluorfen	10 to 200 µg/kg	
		Paraquat dichloride	5 to 200 µg/kg	
		Pendimethalin	NAL/INS/SOP /003 Issue.	10 to 200 µg/kg

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Clomazone	02, Issue Date, 14.03.2017 (LC-MS MS& GC MSMS)	10 to 500 µg/kg
		Imazethapyr		10 to 500 µg/kg
		Benomyl		5 to 200 µg/kg
		Carbendazim		5 to 200 µg/kg
		Edifenphos		5 to 200 µg/kg
	Oil seeds & by products	1-naphthylacetic acid	NAL/INS/SOP/004, Issue No:01, Issue date 02.04.2018	10 to 500 µg/kg
		2,4-D		10 to 500 µg/kg
		4 Chlorophenoxy acetic acid)		10 to 500 µg/kg
		6-Benzyl adenine		10 to 500 µg/kg
		Abamectin		10 to 500 µg/kg
		Acephate		10 to 500 µg/kg
		Acetamiprid		10 to 500 µg/kg
		Alachlor		10 to 500 µg/kg
		Ametoctradin		10 to 500 µg/kg
		Atrazine		10 to 500 µg/kg
		Azadirachtin		10 to 500 µg/kg
		Azoxystrobin		10 to 500 µg/kg
		Benalaxyl		10 to 500 µg/kg
		Benomyl		10 to 500 µg/kg
		Bifenazate		10 to 500 µg/kg
		Bitertanol		10 to 500 µg/kg
		Boscalid		10 to 500 µg/kg
		Buprofezin		10 to 500 µg/kg
		Butachlor		10 to 500 µg/kg
		Carbaryl		10 to 500 µg/kg
		Carbendazim		10 to 500 µg/kg
		Carbofuran		1.0 to 500 µg/kg
		Carboxin		10 to 500 µg/kg
		Cartap hydrochloride		10 to 500 µg/kg
		Chlorantraniliprole		10 to 500 µg/kg
		Chlorfluazuron		10 to 500 µg/kg
		Chlormequat (CCC)		10 to 500 µg/kg
		Chlorpropham	NAL/INS/SOP/004, Issue	10 to 500 µg/kg

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Clothianidin	No:01, Issue date	10 to 500 µg/kg
		Cyantraniliprole	02.04.2018	10 to 500 µg/kg
		Cyazofamid		10 to 500 µg/kg
		Cymoxanil		10 to 500 µg/kg
		Dazomet		10 to 500 µg/kg
		Diafenthiuron		10 to 500 µg/kg
		Diazinon		10 to 500 µg/kg
		Difenoconazole		10 to 500 µg/kg
		Diflubenzuron		10 to 500 µg/kg
		Dimethoate		10 to 500 µg/kg
		Dimethomorph		10 to 500 µg/kg
		Dinocap		10 to 500 µg/kg
		Dinotefuran		10 to 500 µg/kg
		Diquat		10 to 500 µg/kg
		Dithianon		10 to 500 µg/kg
		Dithiocarbamates		10 to 500 µg/kg
		Diuron		10 to 500 µg/kg
		Dodine		10 to 500 µg/kg
		Edifenphos		10 to 500 µg/kg
		Emamectin benzoate		10 to 500 µg/kg
		Epoxiconazole		10 to 500 µg/kg
		Ethephon		10 to 500 µg/kg
		Ethion		10 to 500 µg/kg
		Ethiprole		10 to 500 µg/kg
		Etoxazole		10 to 500 µg/kg
		Ethoxychlor		10 to 500 µg/kg
		Etrimfos		10 to 500 µg/kg
		Famoxadone		10 to 500 µg/kg
		Fenamidone		10 to 500 µg/kg
		Fenarimol		10 to 500 µg/kg
		Fenazaquin		10 to 500 µg/kg
		Fenhexamid (F)		10 to 500 µg/kg
		Fenobucarb		10 to 500 µg/kg
		Fenpyroximate	NAL/INS/SOP/004, Issue	10 to 500 µg/kg

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		Fenthion	No:01, Issue date 02.04.2018	10 to 500 µg/kg
		Fipronil		2.5 to 500 µg/kg
		Flonicamid		10 to 500 µg/kg
		Flubendiamide		10 to 500 µg/kg
		Flufenoxuron		10 to 500 µg/kg
		Flufenzine		10 to 500 µg/kg
		Fluopicolide		10 to 500 µg/kg
		Fluopyram		10 to 500 µg/kg
		Flusilazole		10 to 500 µg/kg
		Fluxapyroxad		10 to 500 µg/kg
		Forchlorfenuron (CPPU)		10 to 500 µg/kg
		Fosetyl-Al		10 to 500 µg/kg
		Glufosinate-ammonium		10 to 500 µg/kg
		Glyphosate		10 to 500 µg/kg
		Hexaconazole		10 to 500 µg/kg
		Hexythiazox		10 to 500 µg/kg
		Homobrassinolide		10 to 500 µg/kg
		Imidacloprid		10 to 500 µg/kg
		Indoxacarb		10 to 500 µg/kg
		Iprobenphos		10 to 500 µg/kg
		Iprodione		10 to 500 µg/kg
		Iprovalicarb		10 to 500 µg/kg
		Isoprothiolane		10 to 500 µg/kg
		Isoproturon		10 to 500 µg/kg
		Kresoxim methyl		10 to 500 µg/kg
		Linuron		10 to 500 µg/kg
		Lufenuron		10 to 500 µg/kg
		Malathion		10 to 500 µg/kg
		Mandipropamid		10 to 500 µg/kg
		Mepiquat		10 to 500 µg/kg
		Meptyldinocap		10 to 500 µg/kg
		Metalaxyl		10 to 500 µg/kg
		Methamidophos		10 to 500 µg/kg
		Methomyl	NAL/INS/SOP/004,	10 to 500 µg/kg

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		Metolachlor and S-metolachlor (metolachlor including other mixtures of constituent isomers including S-metolachlor (sum of isomers))	Issue No:01, Issue date 02.04.2018	10 to 500 µg/kg
		Metrafenone		10 to 500 µg/kg
		Metribuzin		10 to 500 µg/kg
		Milbemectin		10 to 500 µg/kg
		Monocrotophos		10 to 500 µg/kg
		Myclobutanil		10 to 500 µg/kg
		Nitenpyram		10 to 500 µg/kg
		Nereistoxin		10 to 500 µg/kg
		Novaluron		10 to 500 µg/kg
		Oxadiazon		10 to 500 µg/kg
		Oxycarboxin		10 to 500 µg/kg
		Oxydemeton- methyl		10 to 500 µg/kg
		Paclbutrazol		10 to 500 µg/kg
		Paraquat		10 to 500 µg/kg
		Penconazole		10 to 500 µg/kg
		Pencycuron		10 to 500 µg/kg
		Pendimethalin		10 to 500 µg/kg
		Phenthoate		10 to 500 µg/kg
		Phorate		10 to 500 µg/kg
		Phosalone		10 to 500 µg/kg
		Phosphamidon		10 to 500 µg/kg
		Picoxystrobin		10 to 500 µg/kg
		Pirimiphos-methyl		10 to 500 µg/kg
		Profenophos		10 to 500 µg/kg
		Propamocarb		10 to 500 µg/kg
		Propanil		10 to 500 µg/kg
		Propargite		10 to 500 µg/kg
		Propiconazole	NAL/INS/SOP/004, Issue	10 to 500 µg/kg

Vinay Kumar Tyagi
Convenor

Mallika Gope
Program Manager

Laboratory Nawal Analytical Laboratories, Plot No. 100, New SIDCO Industrial Estate, Srinagar, Hosur, Tamil Nadu

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			No:01, Issue date 02.04.2018	
		Propoxur		10 to 500 µg/kg
		Pymetrozine		10 to 500 µg/kg
		Pyraclostrobin		10 to 500 µg/kg
		Pyridaben		10 to 500 µg/kg
		Quinalphos		10 to 500 µg/kg
		Simazine		10 to 500 µg/kg
		Spinetoram		10 to 500 µg/kg
		Spinosad		10 to 500 µg/kg
		Spirodiclofen		10 to 500 µg/kg
		Spiromesifen		10 to 500 µg/kg
		Spirotetramat		10 to 500 µg/kg
		Tebuconazole		10 to 500 µg/kg
		Temephos		10 to 500 µg/kg
		Tetraconazole		10 to 500 µg/kg
		Thiabendazole		10 to 500 µg/kg
		Thiacloprid		10 to 500 µg/kg
		Thiamethoxam		10 to 500 µg/kg
		Thiobencarb		10 to 500 µg/kg
		Thiodicarb		10 to 500 µg/kg
		Thiometon		10 to 500 µg/kg
		Thiocyclam		10 to 500 µg/kg
		Thiophanate-methyl		10 to 500 µg/kg
		Tolfenpyrad		10 to 500 µg/kg
		Triadimefon		10 to 500 µg/kg
		Triadimenol		10 to 500 µg/kg
		Triazophos		10 to 500 µg/kg
		Trichlorfon		10 to 500 µg/kg
		Tricyclazole		10 to 500 µg/kg
		Tridemorph		10 to 500 µg/kg
		Trifloxystrobin		10 to 500 µg/kg
		Uracil		10 to 500 µg/kg
		Metconazole	NAL/INS/SOP/004, Issue	10 to 500 µg/kg

Vinay Kumar Tyagi
Convenor

Mallika Gope
Program Manager

Laboratory Nawal Analytical Laboratories, Plot No. 100, New SIDCO Industrial Estate, Srinagar, Hosur, Tamil Nadu

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Prothioconazole	No:01, Issue date	10 to 500 µg/kg
		Tebufenozide	02.04.2018	10 to 500 µg/kg
		Fluazifop-P		10 to 500 µg/kg
		Iodosulfuron-methyl		10 to 500 µg/kg
		Hydrogen cyanamide		10 to 500 µg/kg
		Aldrin		10 to 500 µg/kg
		4-bromo-2-chlorophenol (metabolite of Profenophos)		10 to 500 µg/kg
		Allethrin and Bioallethrin		10 to 500 µg/kg
		Bendiocarb		10 to 500 µg/kg
		Bifenthrin		10 to 500 µg/kg
		Captafol		10 to 500 µg/kg
		Captan		10 to 500 µg/kg
		Chlordane (cis)		10 to 500 µg/kg
		Chlordane (trans)		10 to 500 µg/kg
		Chlorfenapyr		10 to 500 µg/kg
		Chlorfenvinphos		10 to 500 µg/kg
		Chlorothalonil		10 to 500 µg/kg
		Chlorpyrifos		10 to 500 µg/kg
		Chlorpyrifos methyl		10 to 500 µg/kg
		Cyflumetofen		10 to 500 µg/kg
		Cyfluthrin		10 to 500 µg/kg
		Cypermethrin		10 to 500 µg/kg
		DDT		10 to 500 µg/kg
		Deltamethrin		10 to 500 µg/kg
		Dichlorvos		10 to 500 µg/kg
		Dicofol		10 to 500 µg/kg
		Dieldrin		10 to 500 µg/kg
		Endosulphan		10 to 500 µg/kg
		Endrin		10 to 500 µg/kg
		Ethofenprox		10 to 500 µg/kg
		Fenitrothion		10 to 500 µg/kg
		Fenpropathrin	NAL/INS/SOP/004, Issue	10 to 500 µg/kg

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		Fenvalerate	No:01, Issue date	10 to 500 µg/kg
		Flufenacet	02.04.2018	10 to 500 µg/kg
		α-HCH		10 to 500 µg/kg
		β-HCH		10 to 500 µg/kg
		Hexachlorocyclohexane (HCH), sum of isomers, except the gamma isomer		10 to 500 µg/kg
		Heptachlor		10 to 500 µg/kg
		Lambda-cyhalothrin		10 to 500 µg/kg
		Lindane (γ-HCH)		10 to 500 µg/kg
		Oxyfluorfen		10 to 500 µg/kg
		Parathion methyl		10 to 500 µg/kg
		Parathion ethyl		10 to 500 µg/kg
		Permethrin		10 to 500 µg/kg
		Propetamphos		10 to 500 µg/kg
		Pyriproxyfen		10 to 500 µg/kg
		tau-Fluvalinate		10 to 500 µg/kg
		Transfluthrin		10 to 500 µg/kg
		Trifluralin		10 to 500 µg/kg
		Mycotoxin		
		Aflatoxin B1		0.5 to 50 µg/kg
		Aflatoxin B2		0.5 to 50 µg/kg
		Aflatoxin G1		0.5 to 50 µg/kg
		Aflatoxin G2		0.5 to 50 µg/kg
	Rice, Maize & Psyllium Husk	1-Naphthyl acetic acid	NAL/INS/SOP/005, Issue No:01, Issue date 02.04.2018	10 to 500 µg/kg
		2,4-D		10 to 500 µg/kg
		4 Chlorophenoxy acetic acid		10 to 500 µg/kg
		6-Benzyl adenine		10 to 500 µg/kg
		Abamectin		10 to 500 µg/kg
		Acephate		10 to 500 µg/kg
		Acetamiprid		10 to 500 µg/kg
		Alachlor	NAL/INS/SOP/005, Issue	10 to 500 µg/kg

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Ametoctradin	No:01, Issue date	10 to 500 µg/kg
		Atrazine	02.04.2018	10 to 500 µg/kg
		Azadirachtin		10 to 500 µg/kg
		Azoxystrobin		10 to 500 µg/kg
		Benalaxyl		10 to 500 µg/kg
		Benomyl		10 to 500 µg/kg
		Bifenazate		10 to 500 µg/kg
		Bitertanol		10 to 500 µg/kg
		Boscalid		10 to 500 µg/kg
		Buprofezin		10 to 500 µg/kg
		Butachlor		10 to 500 µg/kg
		Carbaryl		10 to 500 µg/kg
		Carbendazim		10 to 500 µg/kg
		Carbofuran		1.0 to 500 µg/kg
		Carboxin		10 to 500 µg/kg
		Cartap hydrochloride		10 to 500 µg/kg
		Chlorantraniliprole		10 to 500 µg/kg
		Chlorfluazuron		10 to 500 µg/kg
		Chlormequat (CCC)		10 to 500 µg/kg
		Chlorpropham		10 to 500 µg/kg
		Clothianidin		10 to 500 µg/kg
		Cyantraniliprole		10 to 500 µg/kg
		Cyazofamid		10 to 500 µg/kg
		Cyflumetofen		10 to 500 µg/kg
		Cymoxanil		10 to 500 µg/kg
		Dazomet		10 to 500 µg/kg
		Diafenthiuron		10 to 500 µg/kg
		Diazinon		10 to 500 µg/kg
		Difenoconazole		10 to 500 µg/kg
		Diflubenzuron		10 to 500 µg/kg
		Dimethoate		10 to 500 µg/kg
		Dimethomorph		10 to 500 µg/kg
		Dinocap		10 to 500 µg/kg
		Dinotefuran	NAL/INS/SOP/004, Issue	10 to 500 µg/kg

Vinay Kumar Tyagi
Convenor

Mallika Gope
Program Manager

Laboratory Nawal Analytical Laboratories, Plot No. 100, New SIDCO Industrial Estate, Srinagar, Hosur, Tamil Nadu

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Diquat	No:01, Issue date	10 to 500 µg/kg
		Dithianon	02.04.2018	10 to 500 µg/kg
		Diuron		10 to 500 µg/kg
		Dodine		10 to 500 µg/kg
		Edifenphos		10 to 500 µg/kg
		Emamectin benzoate		10 to 500 µg/kg
		Epoiconazole		10 to 500 µg/kg
		Ethephon		10 to 500 µg/kg
		Ethion		10 to 500 µg/kg
		Ethiprole		10 to 500 µg/kg
		Ethoxychlor		10 to 500 µg/kg
		Etoxazole		10 to 500 µg/kg
		Etrimfos		10 to 500 µg/kg
		Famoxadone		10 to 500 µg/kg
		Fenamidone		10 to 500 µg/kg
		Fenarimol		10 to 500 µg/kg
		Fenazaquin		10 to 500 µg/kg
		Fenhexamid (F)		10 to 500 µg/kg
		Fenobucarb		10 to 500 µg/kg
		Fenpyroximate (A) (F) (R)		10 to 500 µg/kg
		Fenthion		10 to 500 µg/kg
		Fipronil		2.5 to 500 µg/kg
		Flonicamid		10 to 500 µg/kg
		Fluazifop-P		10 to 500 µg/kg
		Flubendiamide		10 to 500 µg/kg
		Flufenoxuron		10 to 500 µg/kg
		Flufenzine		10 to 500 µg/kg
		Fluopicolide		10 to 500 µg/kg
		Fluopyram		10 to 500 µg/kg
		Flusilazole		10 to 500 µg/kg
		Fluxapyroxad		10 to 500 µg/kg
		Forchlorfenuron (CPPU)		10 to 500 µg/kg
		Fosetyl-Al		10 to 500 µg/kg
		Glufosinate-ammonium	NAL/INS/SOP/004, Issue	10 to 500 µg/kg

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Glyphosate	No:01, Issue date	10 to 500 µg/kg
		Hexaconazole	02.04.2018	10 to 500 µg/kg
		Hexythiazox		10 to 500 µg/kg
		Homobrassinolide		10 to 500 µg/kg
		Hydrogen cyanamide		10 to 500 µg/kg
		Imidacloprid		10 to 500 µg/kg
		Indoxacarb		10 to 500 µg/kg
		Iodosulfuron-methyl		10 to 500 µg/kg
		Iprobenphos		10 to 500 µg/kg
		Iprodione		10 to 500 µg/kg
		Iprovalicarb		10 to 500 µg/kg
		Isoprothiolane		10 to 500 µg/kg
		Isoproturon		10 to 500 µg/kg
		Kresoxim methyl		10 to 500 µg/kg
		Linuron		10 to 500 µg/kg
		Lufenuron		10 to 500 µg/kg
		Malathion		10 to 500 µg/kg
		Mandipropamid		10 to 500 µg/kg
		Mepiquat		10 to 500 µg/kg
		Meptyldinocap		10 to 500 µg/kg
		Metalaxyl and metalaxyl-M (metalaxyl including other mixtures of constituent isomers including metalaxyl-M (sum of isomers))		10 to 500 µg/kg
		Methamidophos		10 to 500 µg/kg
		Methomyl		10 to 500 µg/kg
		Metolachlor and S-metolachlor		10 to 500 µg/kg
		Metrafenone		10 to 500 µg/kg
		Metribuzin		10 to 500 µg/kg
		Milbemectin		10 to 500 µg/kg
		Monocrotophos		10 to 500 µg/kg

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Myclobutanil		10 to 500 µg/kg
		Metconazole		10 to 500 µg/kg
		Nitenpyram		10 to 500 µg/kg
		Nereistoxin		10 to 500 µg/kg
		Novaluron		10 to 500 µg/kg
		Oxadiazon		10 to 500 µg/kg
		Oxycarboxin		10 to 500 µg/kg
		Oxydemeton- methyl		10 to 500 µg/kg
		Paclobutrazol		10 to 500 µg/kg
		Paraquat		10 to 500 µg/kg
		Penconazole		10 to 500 µg/kg
		Pencycuron		10 to 500 µg/kg
		Pendimethalin		10 to 500 µg/kg
		Phenthoate		10 to 500 µg/kg
		Phorate		10 to 500 µg/kg
		Phosalone		10 to 500 µg/kg
		Phosphamidon		10 to 500 µg/kg
		Picoxystrobin		10 to 500 µg/kg
		Pirimiphos-methyl		10 to 500 µg/kg
		Profenophos		10 to 500 µg/kg
		Propamocarb		10 to 500 µg/kg
		Propanil		10 to 500 µg/kg
		Propargite		10 to 500 µg/kg
		Propiconazole		10 to 500 µg/kg
		Propoxur		10 to 500 µg/kg
		Prothioconazole		10 to 500 µg/kg
		Pymetrozine		10 to 500 µg/kg
		Pyraclostrobin		10 to 500 µg/kg
		Pyridaben		10 to 500 µg/kg
		Quinalphos		10 to 500 µg/kg
		Simazine		10 to 500 µg/kg
		Spinetoram		10 to 500 µg/kg
		Spinosad		10 to 500 µg/kg
		Spirodiclofen	NAL/INS/SOP/005, Issue	10 to 500 µg/kg

Vinay Kumar Tyagi
Convenor

Mallika Gope
Program Manager

Laboratory Nawal Analytical Laboratories, Plot No. 100, New SIDCO Industrial Estate, Srinagar, Hosur, Tamil Nadu

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Spiromesifen	No:01, Issue date 02.04.2018	10 to 500 µg/kg
		Spirotetramat		10 to 500 µg/kg
		Tebuconazole		10 to 500 µg/kg
		Tebuconazole		10 to 500 µg/kg
		Temephos		10 to 500 µg/kg
		Tetraconazole		10 to 500 µg/kg
		Thiabendazole		10 to 500 µg/kg
		Thiacloprid		10 to 500 µg/kg
		Thiamethoxam		10 to 500 µg/kg
		Thiobencarb		10 to 500 µg/kg
		Thiodicarb		10 to 500 µg/kg
		Thiometon		10 to 500 µg/kg
		Thiocyclam		10 to 500 µg/kg
		Thiophanate-methyl		10 to 500 µg/kg
		Tolfenpyrad		10 to 500 µg/kg
		Triadimefon		10 to 500 µg/kg
		Triadimenol		10 to 500 µg/kg
		Triazophos		10 to 500 µg/kg
		Trichlorfon		10 to 500 µg/kg
		Tricyclazole		10 to 500 µg/kg
		Tridemorph		10 to 500 µg/kg
		Trifloxystrobin		10 to 500 µg/kg
		Uracil		10 to 500 µg/kg
		Aldrin		10 to 500 µg/kg
		Dithiocarbamates		10 to 500 µg/kg
		Allethrin and Bioallethrin		10 to 500 µg/kg
		Bendiocarb		10 to 500 µg/kg
		Bifenthrin		10 to 500 µg/kg
		Captafol		10 to 500 µg/kg
		Captan		10 to 500 µg/kg
		Chlordane (cis)		10 to 500 µg/kg
		Chlordane	NAL/INS/SOP/005, Issue	10 to 500 µg/kg

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		(trans)	No:01, Issue date 02.04.2018	
		Chlorfenapyr		10 to 500 µg/kg
		Chlorfenvinphos		10 to 500 µg/kg
		Chlorothalonil		10 to 500 µg/kg
		Chlorpyrifos		10 to 500 µg/kg
		Chlorpyrifos methyl		10 to 500 µg/kg
		Cyfluthrin		10 to 500 µg/kg
		Cypermethrin		10 to 500 µg/kg
		DDT		10 to 500 µg/kg
		Deltamethrin		10 to 500 µg/kg
		Dichlorvos		10 to 500 µg/kg
		Dicofol		10 to 500 µg/kg
		Dieldrin		10 to 500 µg/kg
		Endosulphan		10 to 500 µg/kg
		Endrin		10 to 500 µg/kg
		Ethofenprox		10 to 500 µg/kg
		Fenitrothion		10 to 500 µg/kg
		Fenpropathrin		10 to 500 µg/kg
		Fenvalerate		10 to 500 µg/kg
		Flufenacet		10 to 500 µg/kg
		α-HCH		10 to 500 µg/kg
		β-HCH		10 to 500 µg/kg
		Hexachlorocyclohexane (HCH), sum of isomers, except the gamma isomer		10 to 500 µg/kg
		Heptachlor		10 to 500 µg/kg
		Lambda-cyhalothrin		10 to 500 µg/kg
		γ-HCH		10 to 500 µg/kg
		Oxyfluorfen		10 to 500 µg/kg
		Parathion methyl		10 to 500 µg/kg
		Parathion ethyl		10 to 500 µg/kg
		Permethrin		10 to 500 µg/kg
		Propetamphos		10 to 500 µg/kg

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Pyriproxyfen		10 to 500 µg/kg
		<i>tau</i> -Fluvalinate		10 to 500 µg/kg
		Transfluthrin		10 to 500 µg/kg
		Trifluralin		10 to 500 µg/kg
		4-bromo-2-chlorophenol		10 to 500 µg/kg
		Aflatoxin B1		0.5 to 50 µg/kg
		Aflatoxin B2		0.5 to 50 µg/kg
		Aflatoxin G1		0.5 to 50 µg/kg
		Aflatoxin G2		0.5 to 50 µg/kg
	Herbs, spices & condiments	1-naphthyl acetic acid	NAL/INS/SOP/006, Issue No:01, Issue date 02.04.2018	10 to 500 µg/kg
		2,4-D		10 to 500 µg/kg
		4 Chlorophenoxy acetic acid		10 to 500 µg/kg
		6-Benzyl adenine		10 to 500 µg/kg
		Abamectin		10 to 500 µg/kg
		Acephate		10 to 500 µg/kg
		Acetamiprid		10 to 500 µg/kg
		Ametoctradin		10 to 500 µg/kg
		Atrazine		10 to 500 µg/kg
		Azadirachtin		10 to 500 µg/kg
		Azoxystrobin		10 to 500 µg/kg
		Benalaxyl		10 to 500 µg/kg
		Benomyl		10 to 500 µg/kg
		Bifenazate		10 to 500 µg/kg
		Bitertanol	NAL/INS/SOP/006, Issue No:01, Issue date 02.04.2018	10 to 500 µg/kg
		Boscalid		10 to 500 µg/kg
		Buprofezin		10 to 500 µg/kg
		Butachlor		10 to 500 µg/kg
		Carbendazim		10 to 500 µg/kg
		Carbofuran		1.0 to 500 µg/kg
		Carboxin		10 to 500 µg/kg
		Cartap hydrochloride		10 to 500 µg/kg
		Chlorantraniliprole	NAL/INS/SOP/005, Issue	10 to 500 µg/kg

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Chlorfluazuron	No:01, Issue date 02.04.2018	10 to 500 µg/kg
		Chlormequat		10 to 500 µg/kg
		Chlorpropham		10 to 500 µg/kg
		Clothianidin		10 to 500 µg/kg
		Cyantraniliprole		10 to 500 µg/kg
		Cyazofamid		10 to 500 µg/kg
		Cyflumetofen		10 to 500 µg/kg
		Cymoxanil		10 to 500 µg/kg
		Dazomet		10 to 500 µg/kg
		Diafenthiuron		10 to 500 µg/kg
		Diazinon		10 to 500 µg/kg
		Difenoconazole		10 to 500 µg/kg
		Diflubenzuron		10 to 500 µg/kg
		Dimethomorph		10 to 500 µg/kg
		Dinocap		10 to 500 µg/kg
		Dinotefuran		10 to 500 µg/kg
		Diquat		10 to 500 µg/kg
		Diuron		10 to 500 µg/kg
		Dodine		10 to 500 µg/kg
		Edifenphos		10 to 500 µg/kg
		Emamectin benzoate	10 to 500 µg/kg	
		Epoxiconazole	10 to 500 µg/kg	
		Ethephon	10 to 500 µg/kg	
		Ethiprole	10 to 500 µg/kg	
		Ethoxychlor	10 to 500 µg/kg	
		Etoxazole	10 to 500 µg/kg	
		Famoxadone	10 to 500 µg/kg	
		Fenamidone	10 to 500 µg/kg	
		Fenarimol	10 to 500 µg/kg	
		Fenazaquin	10 to 500 µg/kg	
		Fenhexamid (F)	10 to 500 µg/kg	
		Fenobucarb	10 to 500 µg/kg	
		Fenpyroximate (A) (F) (R)	NAL/INS/SOP/006, Issue	10 to 500 µg/kg

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Fenthion	No:01, Issue date 02.04.2018	10 to 500 µg/kg
		Fipronil		2.5 to 500 µg/kg
		Flonicamid		10 to 500 µg/kg
		Flubendiamide		10 to 500 µg/kg
		Flufenoxuron		10 to 500 µg/kg
		Flufenzine		10 to 500 µg/kg
		Fluopicolide		10 to 500 µg/kg
		Fluopyram		10 to 500 µg/kg
		Flusilazole		10 to 500 µg/kg
		Fluxapyroxad		10 to 500 µg/kg
		Fluazifop-P		10 to 500 µg/kg
		Forchlorfenuron		10 to 500 µg/kg
		Glufosinate-ammonium		10 to 500 µg/kg
		Glyphosate		10 to 500 µg/kg
		Hexaconazole		10 to 500 µg/kg
		Hexythiazox		10 to 500 µg/kg
		Homobrassinolide		10 to 500 µg/kg
		Hydrogen cyanamide		10 to 500 µg/kg
		Imidacloprid		10 to 500 µg/kg
		Indoxacarb		10 to 500 µg/kg
		Iprovalicarb		10 to 500 µg/kg
		Isoprothiolane		10 to 500 µg/kg
		Iodosulfuron-methyl		10 to 500 µg/kg
		Isoproturon		10 to 500 µg/kg
		Kresoxim methyl		10 to 500 µg/kg
		Linuron		10 to 500 µg/kg
		Lufenuron		10 to 500 µg/kg
		Mandipropamid		10 to 500 µg/kg
		Mepiquat		10 to 500 µg/kg
		Meptyldinocap		10 to 500 µg/kg
		Metalaxyl and metalaxyl-M		10 to 500 µg/kg
		Metconazole		10 to 500 µg/kg
		Methamidophos	NAL/INS/SOP/006, Issue	10 to 500 µg/kg

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		Methomyl	No:01, Issue date 02.04.2018	10 to 500 µg/kg
		Metolachlor and S-metolachlor		10 to 500 µg/kg
		Metrafenone		10 to 500 µg/kg
		Metribuzin		10 to 500 µg/kg
		Milbemectin		10 to 500 µg/kg
		Myclobutanil		10 to 500 µg/kg
		Nitenpyram		10 to 500 µg/kg
		Nereistoxin		10 to 500 µg/kg
		Novaluron		10 to 500 µg/kg
		Oxadiazon		10 to 500 µg/kg
		Oxycarboxin		10 to 500 µg/kg
		Oxydemeton- methyl		10 to 500 µg/kg
		Paclobutrazol		10 to 500 µg/kg
		Paraquat		10 to 500 µg/kg
		Penconazole		10 to 500 µg/kg
		Pencycuron		10 to 500 µg/kg
		Pendimethalin		10 to 500 µg/kg
		Phosphamidon		10 to 500 µg/kg
		Picoxystrobin		10 to 500 µg/kg
		Propamocarb		10 to 500 µg/kg
		Propanil		10 to 500 µg/kg
		Propargite		10 to 500 µg/kg
		Propiconazole		10 to 500 µg/kg
		Propoxur		10 to 500 µg/kg
		Prothioconazole		10 to 500 µg/kg
		Pymetrozine		10 to 500 µg/kg
		Pyraclostrobin		10 to 500 µg/kg
		Pyridaben		10 to 500 µg/kg
		Simazine		10 to 500 µg/kg
		Spinetoram		10 to 500 µg/kg
		Spinosad		10 to 500 µg/kg
		Spirodiclofen		10 to 500 µg/kg
		Spiromesifen	NAL/INS/SOP/006, Issue	10 to 500 µg/kg

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		Spirotetramat	No:01, Issue date	10 to 500 µg/kg
		Tebuconazole	02.04.2018	10 to 500 µg/kg
		Temephos		10 to 500 µg/kg
		Tetraconazole		10 to 500 µg/kg
		Thiabendazole		10 to 500 µg/kg
		Thiacloprid		10 to 500 µg/kg
		Thiamethoxam		10 to 500 µg/kg
		Thiobencarb		10 to 500 µg/kg
		Thiodicarb		10 to 500 µg/kg
		Thiometon		10 to 500 µg/kg
		Thiocyclam		10 to 500 µg/kg
		Thiophanate-methyl		10 to 500 µg/kg
		Tolfenpyrad		10 to 500 µg/kg
		Triadimefon		10 to 500 µg/kg
		Triadimenol		10 to 500 µg/kg
		Tricyclazole		10 to 500 µg/kg
		Tridemorph		10 to 500 µg/kg
		Trifloxystrobin		10 to 500 µg/kg
		Uracil		10 to 500 µg/kg
		Allethrin and Bioallethrin		10 to 500 µg/kg
		Captafol		10 to 500 µg/kg
		Captan		10 to 500 µg/kg
		Chlordane (cis & trans)		10 to 500 µg/kg
		Chlorfenapyr		10 to 500 µg/kg
		Chlorpyrifos methyl		10 to 500 µg/kg
		Cyfluthrin		10 to 500 µg/kg
		Deltamethrin		10 to 500 µg/kg
		Dichlorvos		10 to 500 µg/kg
		Ethofenprox		10 to 500 µg/kg
		Fenpropathrin		10 to 500 µg/kg
		Flufenacet		10 to 500 µg/kg
		Oxyfluorfen		10 to 500 µg/kg
		Permethrin		10 to 500 µg/kg
		Propetamphos		10 to 500 µg/kg

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		Pyriproxyfen		10 to 500 µg/kg
		tau-Fluvalinate		10 to 500 µg/kg
		Transfluthrin		10 to 500 µg/kg
		Trifluralin		10 to 500 µg/kg
	Agri Products (Organic): Rice	Carbaryl	NAL/INS/SOP/009, Issue No:01, Issue date 01.08.2018	5.0 to 500 µg/kg
		Dichlorvos		5.0 to 500 µg/kg
		Dimethoate		5.0 to 500 µg/kg
		Malathion		5.0 to 500 µg/kg
		4-Chloro-3-methylphenol		5.0 to 500 µg/kg
		2,4-D		5.0 to 500 µg/kg
		Ethion		5.0 to 500 µg/kg
		Monocrotophos		5.0 to 500 µg/kg
		Paraquat dichloride		5.0 to 500 µg/kg
		Phosalone		5.0 to 500 µg/kg
		Trichlorfon		5.0 to 500 µg/kg
		Thiometon		5.0 to 500 µg/kg
		Acephate		5.0 to 500 µg/kg
		Afidopyropen		5.0 to 500 µg/kg
		Methamidophos		5.0 to 500 µg/kg
		Atrazine		5.0 to 500 µg/kg
		Carbendazim		5.0 to 500 µg/kg
		Benomyl		5.0 to 500 µg/kg
		Phorate		5.0 to 500 µg/kg
		Pirimiphos- methyl		5.0 to 500 µg/kg
		Alachlor		5.0 to 500 µg/kg
		Alfa Naphthyl Acetic Acid		5.0 to 500 µg/kg
		Bitertanol		5.0 to 500 µg/kg
		Cartap hydrochloride		5.0 to 500 µg/kg
		Chlormequat chloride (CCC)		5.0 to 500 µg/kg
		Clofentezine		5.0 to 500 µg/kg
		Edifenphos		5.0 to 500 µg/kg
		Phenthoate		5.0 to 500 µg/kg
		Diflubenzuron	NAL/INS/SOP/009, Issue	5.0 to 500 µg/kg

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		Dodine	No:01, Issue date 01.08.2018	5.0 to 500 µg/kg
		Diuron		5.0 to 500 µg/kg
		Ethephon		5.0 to 500 µg/kg
		Flupyradifurone		5.0 to 500 µg/kg
		Fluchloralin		5.0 to 500 µg/kg
		Maleic hydrazide		5.0 to 500 µg/kg
		Metalaxyl		5.0 to 500 µg/kg
		Methomyl		5.0 to 500 µg/kg
		Methyl chlorophenoxyacetic Acid (MCPA)		5.0 to 500 µg/kg
		Oxadiazon		5.0 to 500 µg/kg
		Oxydemeton methyl		5.0 to 500 µg/kg
		Quinalphos		5.0 to 500 µg/kg
		Thiophanate methyl		5.0 to 500 µg/kg
		Triazophos		5.0 to 500 µg/kg
		Profenofos		5.0 to 500 µg/kg
		Fenpropathrin		5.0 to 500 µg/kg
		Fenarimol		5.0 to 500 µg/kg
		Hexaconazole		5.0 to 500 µg/kg
		Propiconazole		5.0 to 500 µg/kg
		Myclobutanil		5.0 to 500 µg/kg
		Sulfosulfuron		5.0 to 500 µg/kg
		Sulfoxaflor		5.0 to 500 µg/kg
		Trifluralin		5.0 to 500 µg/kg
		Ethoxysulfuron		5.0 to 500 µg/kg
		Metolachlor		5.0 to 500 µg/kg
		Glyphosate		5.0 to 500 µg/kg
		Linuron		5.0 to 500 µg/kg
		Oxyfluorfen		5.0 to 500 µg/kg
		Carbosulfan		5.0 to 500 µg/kg
		Tricyclazole		5.0 to 500 µg/kg
		Imidacloprid		5.0 to 500 µg/kg
		Butachlor	NAL/INS/SOP/009, Issue	5.0 to 500 µg/kg

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		Chlorimuron-ethyl	No:01, Issue date 01.08.2018	5.0 to 500 µg/kg
		Diclofop-methyl		5.0 to 500 µg/kg
		Metribuzin		5.0 to 500 µg/kg
		Tridemorph		5.0 to 500 µg/kg
		Penconazole		5.0 to 500 µg/kg
		Fenazaquin		5.0 to 500 µg/kg
		Pendimethalin		5.0 to 500 µg/kg
		Pretilachlor		5.0 to 500 µg/kg
		Metsulfuron- methyl		5.0 to 500 µg/kg
		Methabenzthiazu ron		5.0 to 500 µg/kg
		Imazethapyr		5.0 to 500 µg/kg
		Cyhalofop-butyl		5.0 to 500 µg/kg
		Triallate		5.0 to 500 µg/kg
		Spinosad		5.0 to 500 µg/kg
		Thiamethoxam		5.0 to 500 µg/kg
		Fenobucarb		5.0 to 500 µg/kg
		Thiodicarb		5.0 to 500 µg/kg
		Anilophos		5.0 to 500 µg/kg
		Fenoxyp-prop-p- ethyl		5.0 to 500 µg/kg
		Glufosinate- ammonium		5.0 to 500 µg/kg
		Clodinafop- propargyl		5.0 to 500 µg/kg
		Dithianon		5.0 to 500 µg/kg
		Iprobenfos (Kitazin)		5.0 to 500 µg/kg
		Isoprothiolane		5.0 to 500 µg/kg
		Acetamiprid		5.0 to 500 µg/kg
		Cymoxanil		5.0 to 500 µg/kg
		Triadimefon		5.0 to 500 µg/kg
		Fosetyl-Al		5.0 to 500 µg/kg
		Isoproturon		5.0 to 500 µg/kg
		Propargite		5.0 to 500 µg/kg
		Difenoconazole		5.0 to 500 µg/kg
		Benfuracarb	NAL/INS/SOP/009, Issue No:01, Issue date	5.0 to 500 µg/kg
		Quizalofop-ethyl		5.0 to 500 µg/kg

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		Flufenacet	01.08.2018	5.0 to 500 µg/kg
		Buprofezin		5.0 to 500 µg/kg
		Dimethomorph		5.0 to 500 µg/kg
		Chlorfenopyr		5.0 to 500 µg/kg
		Indoxacarb		5.0 to 500 µg/kg
		Lufenuron		5.0 to 500 µg/kg
		Carpropamid		5.0 to 500 µg/kg
		Novaluron		5.0 to 500 µg/kg
		Oxadiargyl		5.0 to 500 µg/kg
		Pyrazosulfuron ethyl		5.0 to 500 µg/kg
		Clomazone		5.0 to 500 µg/kg
		Tebuconazole		5.0 to 500 µg/kg
		Thiachlorprid		5.0 to 500 µg/kg
		Hydrogen cyanide		5.0 to 500 µg/kg
		Hydrogen phosphide/ phosphene		5.0 to 500 µg/kg
		Inorganic bromide as Methyl Bromide		5.0 to 500 µg/kg
		HCH –Alpha		5.0 to 500 µg/kg
		HCH –Beta		5.0 to 500 µg/kg
		HCH –Delta		5.0 to 500 µg/kg
		Chlorfenvinphos		5.0 to 500 µg/kg
		Chlorobenzilate		5.0 to 500 µg/kg
		Chlorpyrifos		5.0 to 500 µg/kg
		Captan		5.0 to 500 µg/kg
		Carbofuran		5.0 to 500 µg/kg
		Cypermethrin		5.0 to 500 µg/kg
		Decamethrin/Deltamethrin		5.0 to 500 µg/kg
		Fenvalerate		5.0 to 500 µg/kg
		Dithiocarbamates		5.0 to 500 µg/kg
		Chlorothalonil		5.0 to 500 µg/kg
		Iprodione		5.0 to 500 µg/kg
		Lambda- cyhalothrin		5.0 to 500 µg/kg
		Fluvalinate		5.0 to 500 µg/kg

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		b-Cyfluthrin		5.0 to 500 µg/kg
		Ethofenprox		5.0 to 500 µg/kg
		Bifenthrin		5.0 to 500 µg/kg
		Metiram		5.0 to 500 µg/kg
		Propineb		5.0 to 500 µg/kg
		Permethrin		5.0 to 500 µg/kg
		Aflatoxin B1	NAL/INS/SOP/LC035 Issue No:01, Issue date 02.04.2018	0.5 to 50 µg/kg
		Aflatoxin B2		0.5 to 50 µg/kg
		Aflatoxin G1	NAL/INS/SOP/LC035 Issue No:01, Issue date 02.04.2018	0.5 to 50 µg/kg
		Aflatoxin G2		0.5 to 50 µg/kg
		Copper oxychloride as copper	AOAC 20 th Edition 999.11,Chapter 9, Page 19	5.0 to 50 µg/kg
				5.0 to 500 µg/kg
	Cereals & Pulses Products	Fumonisin B1+B2	NAL/INS/SOP/LCMS013, Issue No:01, Issue date 01.06.2018	50 µg/kg to 1000 µg/kg
		Ochratoxin A		5.0 µg/kg to 100 µg/kg
		Deoxynivalenol (DON)		10 to 500 µg/kg
		Zearalenone		20 to 400 µg/kg
		Melamine	NAL/INS/SOP/LCMS012, Issue No:01, Issue date 01.06.2018	1.0 µg/kg to 10.0 µg/kg
		Persistent organic pollutant		
		Toxaphene	EPA505(1989)	10 to 100 µg/kg
	Beverages (Alcoholic/Non-alcoholic) :	Aldrin	NAL/INS/SOP/008, Issue No:01, Issue date :02.04.2018	10 to 500 µg/kg
		Cis-chlordane		10 to 500 µg/kg
		Dieldrin	NAL/INS/SOP/008, Issue No:01, Issue date :02.04.2018	10 to 500 µg/kg
		Endosulphan		10 to 500 µg/kg
		Gamma-HCH (Lindane)		10 to 500 µg/kg
			Heptachlor	10 to 500 µg/kg
			HCH-Alfa	NAL/INS/SOP/008, Issue No:01, Issue date
		HCH-Beta	10 to 500 µg/kg	

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		HCH-Delta	:02.04.2018	10 to 500 µg/kg
		o,p-DDD		10 to 500 µg/kg
		o,p-DDE		10 to 500 µg/kg
		o,p-DDT		10 to 500 µg/kg
		p,p-DDD		10 to 500 µg/kg
		p,p-DDE		10 to 500 µg/kg
		p,p-DDT		10 to 500 µg/kg
		Trans-chlordane		10 to 500 µg/kg
		Chlorfenvinphos		10 to 500 µg/kg
		Chlorpyrifos		10 to 500 µg/kg
		Cypermethrin		10 to 500 µg/kg
		Diazinon		10 to 500 µg/kg
		Ethion		10 to 500 µg/kg
		Fenitrothion		10 to 500 µg/kg
		Fenvalerate		10 to 500 µg/kg
		Parathion Methyl		10 to 500 µg/kg
		Pirimiphos-methyl		10 to 500 µg/kg
		Phorate		10 to 500 µg/kg
		Ethoxychlor		10 to 500 µg/kg
I.	AYUSH PRODUCTS			
	(Herbal Formulation- Herbal Tablets) (Others-Raw Material-Moringa Leaf powder, Ashwagandha Powder, Cassia Bark)	Heavy Metals		
		Lead	Ayurvedic Pharmacopoeia of India part -2 Vol 3, First Edition, Page No:159-165 by AAS	0.25 -25 mg/kg
		Mercury		0.05-2.0 mg/kg
		Arsenic		0.05-5.0 mg/kg
		Cadmium		0.10-10.0 mg/kg
		Mycotoxins		
		Aflatoxin B1	NAL/INS/SOP/LC001 Issue. 01, Issue Dated. 03.11.2017. by HPLC	2.5 to 40 µg/kg
		Aflatoxin B2		2.5 to 40 µg/kg
	Aflatoxin G1	2.5 to 40 µg/kg		
	Aflatoxin G2	2.5 to 40 µg/kg		
	Pesticides Residue			
		Alachlor	Ayurvedic Pharmacopoeia	10 to 100 µg/kg

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		Aldrin and Dieldrin (sum of)	of India part -2 Vol 3, First Edition, Page No:182-188 by GC MS/MS	10 to 100 µg/kg
		Azinphos -methyl		10 to 100 µg/kg
		Bromopropylate		10 to 100 µg/kg
		Chlordane(sum of cis,trans-and oxythlordane)		10 to 100 µg/kg
		Chlorfenvinphos		10 to 100 µg/kg
		Chlorpyifos		10 to 100 µg/kg
		Chlorpyifos-methyl		10 to 100 µg/kg
		Cypermethrin (and isomers)		10 to 100 µg/kg
		DDT		10 to 100 µg/kg
		Deltamethrin		10 to 100 µg/kg
		Diazinon		10 to 100 µg/kg
		Dichlorvos		10 to 100 µg/kg
		Dithiocarbamates		10 to 100 µg/kg
		Endodulfan		10 to 100 µg/kg
		Endrin		10 to 100 µg/kg
		Ethion		10 to 100 µg/kg
		Fenitrothion		10 to 100 µg/kg
		Fenvalerate		10 to 100 µg/kg
		Fonofos	Ayurvedic Pharmacopoeia of India part -2 Vol 3, First Edition, Page No:182-188 by GC MS/MS	10 to 100 µg/kg
		Heptachlor		10 to 100 µg/kg
		Hexachlorobenzene		10 to 100 µg/kg
		Hexachlorocyclohexane isomers		10 to 100 µg/kg
		Lindane		10 to 100 µg/kg
		Malathion		10 to 100 µg/kg
		Methidathion		10 to 100 µg/kg
		Parathion		10 to 100 µg/kg
		Parathion-methyl		10 to 100 µg/kg
		Permethrin		10 to 100 µg/kg
		Phosalone		10 to 100 µg/kg

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		Piperonyl butoxide		10 to 100 µg/kg
		Pirimiphose-methyl		10 to 100 µg/kg
		Pyrethrins		10 to 100 µg/kg
		Quintozene		10 to 100 µg/kg
X.	HAZARDOUS & RESTRICTED CHEMICALS ROHS (RESTRICTION OF HAZARDOUS SUBSTANCES)			
a.	Electro Technical Products Plastic, Leather, Rubber, Metals	Cadmium as Cd	ASTM E351, BS EN 62321-5	1 to 100 mg/kg
		Lead as Pb	ASTM E351, BS EN 62321-5	1 to 1000 mg/kg
		Mercury as Hg	BS EN 62321-4	1 to 1000 mg/kg
		Hexavalent Chromium as Cr ⁶⁺	ASTM D 6492-99, BS EN 62321-5	1 to 1000 mg/kg
		Polybrominated diphenyl Ether (PBDE)		
		4 -Bromo diphenyl Ether (BDE 003)	BS EN 62321-6	5.0 to 5000 mg/kg
		4,4`-Dibromo diphenyl ether (BDE 015)		5.0 to 5000 mg/kg
		2`,3,4-Tribromo diphenyl ether (BDE 033)		5.0 to 5000 mg/kg
		2,4,4`-Tribromo diphenyl ether (BDE 028)		5.0 to 5000 mg/kg
		2,2`,4,4`-Tetrabromo diphenyl ether (BDE 047)		5.0 to 5000 mg/kg
		2,2`,4,4`,5-Pentabromo biphenyl ether (BDE 099)		5.0 to 5000 mg/kg
		2,2`,4,4`,6-Pentabromo diphenyl ether (BDE 100)	BS EN 62321-6	5.0 to 5000 mg/kg
		2,2`,4,4`,5,5`-Hexabromo diphenyl ether (BDE 153)		5.0 to 5000 mg/kg
		2,2`,4,4`,5,6`-Hexabromo diphenyl ether (BDE 154)		5.0 to 5000 mg/kg

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		2,2',3,4,4',5'6-Heptabromo diphenyl ether (BDE 183)		5.0 to 5000 mg/kg
		2,2',3,4,4',5,5',6-Octobromo diphenyl ether (BDE 203)		5.0 to 5000 mg/kg
		2,2',3,3',4,4',5,5',6-Nonabromo diphenyl ether (BDE 206)		5.0 to 5000 mg/kg
		Decabromo diphenyl ether (BDE 209)		5.0 to 5000 mg/kg
		Polybrominated biphenyl (PBB)		
		4-Bromo biphenyl (BB-003)	BS EN 62321-6	5.0 to 5000 mg/kg
		4,4'-Dibromo biphenyl (BB 015)		5.0 to 5000 mg/kg
		2,4,5-Tribromo biphenyl (BB 029)	BS EN 62321-6	5.0 to 5000 mg/kg
		2,2',4,5'-Tetrabromo biphenyl (BB 049)		5.0 to 5000 mg/kg
		3,3',4,4'-Tetrabromo biphenyl (BB 077)		5.0 to 5000 mg/kg
		2,2',4,5',6-Pentabromo biphenyl (BB 103)		5.0 to 5000 mg/kg
		2,2',4,4',5,5'-Hexabromo biphenyl (BB 153)		5.0 to 5000 mg/kg
		3,3',4,4',5,5'-Hexabromo biphenyl (BB 169)		5.0 to 5000 mg/kg
		Decabromo biphenyl (BB 209)		5.0 to 5000 mg/kg

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		2,2',3,4,4',5,6-Heptabromo diphenylether (FR 250)		5.0 to 5000 mg/kg
		2,2,3,4,4',5,5',6-Octabromodiphenyl ether (FR 250)		5.0 to 5000 mg/kg
		2,2,3,3,4,4,5,5,6 Nonabromo diphenyl ether (FR 250)		5.0 to 5000 mg/kg
b.	Paints	Cadmium	ASTM D 3335- 85A	1 to 1000 mg/kg
		Lead	ASTM D 3335- 85A	1 to 1000 mg/kg
		Mercury	ISO 7252	1 to 1000 mg/kg
		Hexavalent Chromium as Cr ⁶⁺	ISO 3856-5	1 to 1000 mg/kg
c.	Toys , Electrotechnical & Metal Products	Aluminium	BS EN 71-3: A1	15 to10000 mg/kg
		Antimony	EN 71-3: (E),	0.05 to10000 mg/kg
		Arsenic	IS 9873 (Part-3) :	0.05 to10000 mg/kg
		Barium	ISO 8124 (Part-3)	10 to10000 mg/kg
		Boron		10 to5000 mg/kg
		Cadmium		1 to10000 mg/kg
		Cobalt		2.5 to10000 mg/kg
		Copper		1.5 to10000 mg/kg
		Lead		1.5 to10000 mg/kg
		Manganese		1.0 to10000 mg/kg
		Mercury	BS EN 71-3 A1,EN 71-3,	0.05 to10000 mg/kg
		Nickel	IS 9873 (Part-3)	1.5 to10000 mg/kg
		Selenium	ISO 8124 (Part-3)	0.05 to10000 mg/kg
		Strontium		2.5 to10000 mg/kg
		Tin		15 to10000 mg/kg
		Zinc		1.0 to 10000 mg/kg
d	Phthalates			
	Toys &	Di-n-ButylPhtalates (DBP)	IEC 62321-8	1.0 to 5000 mg/kg

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	Electrotechnical , Plastic & Metal Products	Benzyl butyl Phthalates(BBP)	IS 9873 (Part:6)	1.0 to 5000 mg/kg
		Bis-(2-ethylhexy) Phthalates (DEHP)		1.0 to 5000 mg/kg
		Di-n-Octyl Phthalates (DNOP)		1.0 to 5000 mg/kg
		Di-iso-nonyl Phthalates (DINP)		1.0 to 5000 mg/kg
		Di-iso-Decyl Phthalates (DIDP)		1.0 to 5000 mg/kg
e.	Migration for Heavy Metal in Food Contact Materials			
	Materials and articles in contact with food stuffs	Overall Migration/ Global Migration	As per EU Regulation EU-10/2011, IS 9845	0.5 to 500 mg/dm ²
		Aluminium as Al	BS EN 13130-1	0.025 to 1000 mg/ kg
		Barium as Ba		0.01 to 1000 mg/ kg
		Cobalt as Co		0.01 to 1000 mg/ kg
		Copper as Cu		0.01 to 1000 mg/ kg
		Iron as Fe		0.01 to 1000 mg/ kg
		Lithium as Li		0.01 to 1000 mg/ kg
		Manganese as Mn		0.01 to 1000 mg/ kg
		Zinc as Zn		0.01 to 1000 mg/ kg
		Nickel as Ni		0.01 to 1000 mg/ kg
	Lead as Pb		0.01 to 1000 mg/ kg	
XI.	METALS AND ALLOYS			
1.	Ferrous materials (Low Alloy Steel, Carbon steel, Tool steel, Stainless Steel, Cast Iron)	Carbon	IS 228(Part-1)	0.01 to 4.5 %
		Manganese	IS 228 (Part-2)	0.05 to 2.0%
		Silicon	IS 228 (Part- 8)	0.05 to 5.0%
			IS 228 (Part-11)	0.01 to 0.05 %
		Sulphur	IS 228 (Part-9)	0.01 to 0.5%
		Phosphorus	IS 228 (Part-3)	0.02 to 0.15%

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		Chromium	IS 228 (Part-6)	0.1 to 30 %
		Nickel	IS 228 (Part- 5)	0.05 to 22 %
		Molybdenum	IS 228 (Part-7)	1 to 10 %
			IS 228 (Part-10)	0.01 to 1.5 %
		Copper	IS 228 (Part-15)	0.01 to 5 %
	Alloy steel	Carbon	ASTM E 415,	0.025 to 1.2 %
		Silicon	IS 8811 By OES method	0.1 to 1.5%
		Manganese		0.3 to 16.0%
		Phosphorous		0.02 to 0.04%
		Sulphur		0.004-0.01 %
		Chromium		1.5 to 14.5 %
		Molybdenum		0.03 to 1.6 %
		Nickel		0.03 to 6.0 %
		Copper		0.06 to 2.0 %
		Aluminium		0.01 to 0.05 %

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
<u>MECHANICAL TESTING</u>				
I.	PLASTIC & POLYMERS (Packaging And Containers)			
1.	Container for Packaged Drinking Water / Packaged Natural Mineral Water	Identification	IS 15410: (Cl.4.1)	Qualitative
		Design, Shape and Dimension	IS 15410 (Cl.4.2)	Qualitative
		Finish & Appearance	IS 15410 (Cl.4.3)	Qualitative
		Brimful Capacity	IS 2798 Cl. 5	200 ml to 25000 ml
		Wall thickness	IS 2798 Cl. 4.5	0.050 to 5 mm
		Transparency	IS 15410 Annex. A, Cl. 4.6.2	50 to 100%
		Leakage Test :		
		[a] Closure leakage	IS 2798 Cl. 6.1	Qualitative
		[b] Vibration leakage	IS 2798 Cl. 6.2	Qualitative
		[c] Air pressure leakage	IS 2798 Cl. 6.3	Qualitative
			Drop Test	IS 2798 Cl. 8
	Migration test	IS 9845	0.1 to 50 mg/dm ² 0.1 to 200 mg/L	
	Water Potability Test	IS 15410 Annex – B, Cl. 4.6.6	Qualitative	
2.	Plastic Films			
	Films for Packaged Drinking Water / Packaged Natural Mineral Water	Description	IS 15609	Qualitative
		Odour	IS 15609	Qualitative
		Thickness	IS 2508	0.001 to 1 mm
		Width	IS 15609	100 to 400 mm
		Overall Migration	IS 9845	0.1 to 60 mg/dm ²
		Tensile Strength	IS 2508	14 to 60 MPa or N/mm ²
		Elongation At Break	IS 2508	100 to 1500 %
		Dart Impact Resistance	IS 2508	50 to 250 gf
3.	Flexible Pouch for Packaged Drinking Water /	Water Potability Test	IS 15609 Annex. E	Qualitative
		Stack Load Test	IS 15609 Annex F	Qualitative
		Drop Test	IS 15609 Annex. G	Qualitative

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	Packaged Natural Mineral Water	Ink Adhesion Test for Printed Pouch	IS 15609 Annex. H	Qualitative
		Product Resistance Test for Printed Pouch	IS 15609 Annex. J	Qualitative
4.	Polymeric Products	Density/Specific gravity	ASTM D 792-08	0.5 to 3.0 g/cc
		Water Absorption	ASTM D570-e1	Qualitative
		Water Immersion	ASTM D471-16a	Qualitative
		Melt Flow Index	ASTM D 1238,ISO 1133-1	1 g/10 min to100 g/10 min
		Ash Content	ASTM D 5630	0.1 to 65 %
		Hardness Shore A	ASTM D 2240, JIS K 7215	10 to 100 Sh A
		Hardness Shore D	ASTM D 2240,JIS K 7215	10 to 90 Sh D
II.	METALLIC COATINGS & TREATMENT SOLUTIONS			
1.	In Organic and Organic Coating	Neutral salt spray Testing	IS 9844,ASTM-B117-16, ISO 9227, JIS Z 2371	Qualitative
		Cyclic salt spray Testing	ASTM D 6899-03, SAE J2334,JIS Z2371 ASTM D 6577-15	Qualitative
		Copper Accelerated Acetic Acid Salt spray testing(CASS)	ISO 9227,ASTM B368-09	Qualitative
		Accelerated Acetic Acid Salt spray Testing(AASS)	ISO 9227	Qualitative
		Coating Thickness	NAL/MEC/SOP/023, Issue No:02, Issue Date 04.02.2018	1.0 to 2000 micron
III.	MECHANICAL PROPERTIES OF METALS			
1.	Ferrous Materials, alloys & Products, Aluminium and its Alloys	a. Tensile Strength	IS 1608, ISO 6892 ASTM-A370,ASTM-E8/E8M-2016a,JIS Z 2241	100 N/mm ² to 3000 N/mm ²
		a. Yield Strength		
		b. 0.2 Proof strength		1% to 75%
		c. % Elongation		5% to 80 %
		d. % Reduction in area		
e.				

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		Bend Test	IS 1599 ,ASTM A 370, ASTM E 290	Mandrel dia Size – [16,20,32,50,60,64,140,240,280,320mm] Qualitative
		Rockwell Hardness test	IS 1586(Part-1) , ISO 6508-1	60 kgf [20 to100 HRA]
				100 kgf [20 to 100 HRB]
				150 kgf [20 to 100HRC]
				15 N [70 to 97 HR15N]
				30 N [42 to 92 HR30N]
				45 N [20 to 87 HR45N]
		Brinell Hardness test	IS 1500(Part-1), ISO 6506-1	84 to 900 HBW2.5mm ball/187.5kgf Load
				25 to 315 HBW 5 mm Ball/250 kgf Load
				67 to 945 HBW 5 mm Ball/750 Kgf Load
				11 to 122 HBW 10 mm Ball/250 kgf Load
				22 to 244 HBW 10 mm Ball /500 kgf Load
				100 to 500HBW 10 mm Ball/1000 kgf Load
				100 to 500 HBW 10 mm Ball/3000 kgf Load
		Vickers Hardness test	IS 1501(Part-1), ISO 6507-1	13to 1100 Hv1
				14 to 1000 Hv2
				31 to 1400 Hv5
				50 to 1500 Hv10
				72 to 1900 Hv15

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				91 to 1800 Hv20
				128 to 1900 Hv30
				150 to 1800 Hv40
				180 to 1900 Hv50
2.	Welds & Welded Test Specimens	Tensile Strength	BS EN ISO 4136	100 N/mm ² to 2000 N/mm ² , 100 MPa to 2000 Mpa, 1020 kg/cm ² to 20400 kg/cm ²
3.	Copper Materials, alloys & Products	a. Tensile Strength	IS 1608, ISO 6892 ASTM-A370,ASTM-E8/E8M-a JIS Z 2241	100N/mm ² to 2000 N/mm ²
		b. Yield Strength		1% to 75%
		c. % Elongation		5% to 80 %
		d. % Reduction in area		
		Rockwell Hardness test	IS 1586(Part-1), ISO 6508-1 ASTM A 370,ASTM E18	60 kgf [20 to100 HRA]
				100 kgf [20 to 100 HRB]
				150 kgf [20 to 100HRC]
				15 N [70 to 97 HR15N]
				30 N [42 to 92 HR30N]