

Laboratory **Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat**

Accreditation Standard **ISO/IEC 17025: 2005**

Certificate Number **TC-7613 (in lieu of T-3098, T-3099, T-3746)** Page 1 of 34

Validity **22.08.2018 to 21.08.2020** Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
<u>BIOLOGICAL TESTING</u>				
I.	WATER			
1.	Packaged Drinking Water, Packaged Natural Mineral water, Surface Water, Ground Water, Drinking Water, Construction Water, Swimming Pool Water, Industrial Water, Irrigation water, Water from purifiers	E. coli	IS 15185	Qualitative(Present or Absent/250 ml)
		Coliforms	IS 15185	Qualitative(Present or Absent/250 ml)
		Salmonella spp.	IS 15187	Qualitative(Present or Absent/250 ml)
		Shigella spp.	IS 5887 (Part 7)	Qualitative(Present or Absent/250 ml)
		Staphylococcus aureus	IS 5887 (Part 2)	Qualitative(Present or Absent/250 ml)
		Pseudomonas aeruginosa	Ann. D of IS 13428	Qualitative(Present or Absent/250 ml)
		Sulfite Reducing Anaerobes	Ann. C of IS 13428	Qualitative(Present or Absent/50 ml)
		Vibrio cholerae	IS 5887 (Part 5)	Qualitative(Present or Absent/250 ml)
		Vibrio parahaemolyticus	IS 5887 (Part 5)	Qualitative(Present or Absent/250 ml)
		Faecal Streptococci	IS 15186	Qualitative(Present or Absent/250 ml)
		Yeast and Moulds	IS 5403	Qualitative(Present or Absent/250 ml)
		Total aerobic microbial count At 37°C for 24 hrs	IS 5402	≥1 cfu/ml
		Total aerobic microbial count At 22°C for 72 hrs	IS 5402	≥ 1 cfu/ml
		E. coli or Thermo tolerant coliform (By MPN)	IS 1622	Qualitative(Present or Absent/100 ml) 1 to 1600 MPN/ 100 ml
	Coliform (By MPN)	IS 1622	1 to 1600 MPN/ 100 ml	

Vivek Vardhan
Convenor

Alok Jain
Program Director

Laboratory **Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat**

Accreditation Standard **ISO/IEC 17025: 2005**

Certificate Number **TC-7613 (in lieu of T-3098, T-3099, T-3746)** Page 2 of 34

Validity **22.08.2018 to 21.08.2020** Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
II.	FOOD AND AGRICULTURAL PRODUCTS			
1.	Cooked food and Ready to eat Products (Matar Paneer, Sambhar, Idli, Chutney, Baingan Bharta and Chivda, Plain Rice, Jeera Rice, Veg Pulao, Muttar Pulao, Dal, Rice, Bundi Raita, Mix Veg. Jalebi, Ladoo, Pav Bhaji)	Total Bacterial/plate Count	IS 5402 / ISO 4833	≥10 cfu/g
		Coliform count	IS 5401 (Part 1) / ISO 4832	≥10 cfu/g
		<i>E. coli</i> or thermo tolerant coliform	IS 5887 (Part 1)	Qualitative(Present or Absent /g)
		<i>Salmonella</i> spp.	IS 5887 (Part 3)/ ISO 6579	Qualitative(Present or Absent /25 g)
		<i>Staphylococcus aureus</i>	IS 5887 (Part 2) / IS 5887 (Part 8/Sec.I) / ISO 6888 (Part 1)	Qualitative(Present or Absent /g) ≥10 cfu/g
		Yeast & Moulds	IS 5403 / IS 16069 (Part 1)	≥10 cfu/g
		<i>Shigella</i> spp.	IS 5887 (Part 7)	Qualitative(Present or Absent /25 g)
		<i>Enterobacteriaceae</i>	ISO 21528 (Part 2)	≥10 cfu/g
		<i>Bacillus cereus</i>	IS 5887 (Part 6) / ISO 7932	≥ 10 cfu /g
		<i>Listeria monocytogens</i>	IS 14988 (Part 1) / ISO 11290 (Part 1)	Qualitative(Present or Absent /25g)
2.	Fruits and Vegetables (Fruits, Vegetables, Fruits Salad, Tomato Sauce and Vegetable Soup)	Total Bacterial/plate Count	IS 5402 / ISO 4833	≥10 cfu/g
		Coliform count	IS 5401 (Part 1)/ ISO 4832	≥10 cfu/g
		<i>E. coli</i> or thermo tolerant coliform	IS 5887 (Part 1)	Qualitative(Present or Absent /g)
		<i>Salmonella</i> spp.	IS 5887 (Part 3)/ ISO 6579	Qualitative(Present or Absent /25 g)
		<i>Staphylococcus aureus</i>	IS 5887 (Part 2)/ IS 5887 (Part 8/ Sec.I) / ISO 6888 (Part 1)	Qualitative(Present or Absent / g) ≥10 cfu/g
		Yeast & Moulds	IS 5403 RA 2013 / IS 16069 (Part 1)	≥10 cfu/g
			<i>Faecal Streptococci</i>	IS 5887 (Part 2)

Laboratory **Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat**

Accreditation Standard **ISO/IEC 17025: 2005**

Certificate Number **TC-7613 (in lieu of T-3098, T-3099, T-3746)** Page 3 of 34

Validity **22.08.2018 to 21.08.2020** Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		<i>Shigella</i> spp.	IS 5887 (Part 7)	Qualitative(Present or Absent /25 g)
		<i>Clostridium perfringens</i>	IS 5887 (Part 4)	Qualitative(Present or Absent/25 g)
		<i>Bacillus cereus</i>	IS 5887 (Part 6) / ISO 7932	≥ 10 cfu/g
		Enterobacteriaceae	ISO 21528 (Part 2)	≥10 cfu/g
		<i>Listeria monocytogenes</i>	IS 14988 (Part 1)/ ISO 11290 (Part 1)	Qualitative(Present or Absent/25 g)
3.	Spices and Condiments (Chilli Powder, Coriander Powder, Termeric Powder, Achar Masala, Sambhar and Masala, Chhole Masala, Cinnanon, nutmeg, Cardamom, fenugreek, Black Pepper, Clove, Mace, Cumin, Cassia)	Total Bacterial/plate Count	IS 5402	≥10 cfu/g
		Coliform count	IS 5401 (Part 1)	≥10 cfu/g
		<i>E. coli</i>	IS 5887 (Part 1)	Qualitative(Present or Absent/g)
		<i>Salmonella</i> spp.	IS 5887 (Part 3)	Qualitative(Present or Absent/25 g)
		<i>Staphylococcus aureus</i>	IS 5887 (Part 2) / IS 5887 (Part 8/ Sec.I) / ISO 6888 (Part 1)	Qualitative(Present or Absent / g) ≥10 cfu/g
		Yeast & Moulds	IS 5403	≥10 cfu/g
		<i>Shigella</i> spp.	IS 5887 (Part 7)	Qualitative(Present or Absent/25 g)
		Enterobacteriaceae	ISO 21528 (Part 2)	≥10 cfu/g
		<i>Listeria monocytogens</i>	IS 14988 (Part 1) / ISO 11290 (Part 1)	Qualitative(Present or Absent /25g)
		<i>Bacillus cereus</i>	IS 5887 (Part 6)	≥10 cfu/g
4.	Honey	Total count of Pollen and Plant element	IS 4941	50-50000/g
5.	Cereals , Grains and their Products (Black Gram, Wheat Floor, Gram Flour, Corn Flour and Cereal Based Complementary Food)	Total Bacterial/plate Count	IS 5402	≥10 cfu/g
		Coliform count	IS 5401 (Part 1)	≥10 cfu/g
		<i>E. coli</i> or thermo tolerant coliform	IS 5887 (Part 1)	Qualitative(Present or Absent/ g)
		<i>Salmonella</i> spp.	IS 5887 (Part 3)	Qualitative(Present or Absent/25 g)

Laboratory **Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat**

Accreditation Standard **ISO/IEC 17025: 2005**

Certificate Number **TC-7613 (in lieu of T-3098, T-3099, T-3746)** Page 4 of 34

Validity **22.08.2018 to 21.08.2020** Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		<i>Staphylococcus aureus</i>	IS 5887 (Part 2) / IS 5887 (Part 8/ Sec.I) / ISO 6888 (Part 1)	Qualitative(Present or Absent / g) ≥10 cfu/g
		Yeast & Moulds	IS 5403	≥10 cfu/g
		<i>Shigella</i> spp.	IS 5887 (Part 7)	Qualitative(Present or Absent/25 g)
		<i>Enterobacteriaceae</i>	ISO 21528 (Part 2)	≥10 cfu/g
		<i>Listeria monocytogens</i>	IS 14988 (Part 1) / ISO 11290 (Part 1)	Qualitative(Present or Absent /25g)
		Bacillus cereus	IS 5887 (Part 6)	≥10 cfu/g
6.	Sugar and Sugar Products (Misri, Gud, Dextrose, Sucrose)	Total Plate Count	IS 5402 / ISO 4833	≥ 10 cfu /g
		Yeast and Mould count	IS 5403	≥ 10 cfu /g
		Coliform Count	IS 5401(Part 1) / ISO 4832	≥ 10 cfu /g
		Enterobacteriaceae	ISO 21528 (Part 2)	≥ 10 cfu /g
		Bacillus cereus	IS 5887 (Part 6) / ISO 7932	≥ 10 cfu /g
		Salmonella sp.	IS 5887 (Part 2) / ISO 6579	Qualitative(Present or Absent/25g)
		E.coli	IS 5887 (Part I)	Qualitative(Present or Absent/g)
		S. aureus	IS 5887 (Part 2) / IS 5887 (Part 8/Sec.I) / ISO 6888 (Part 1)	Qualitative(Present or Absent/g) ≥ 10 cfu /g
		Faecal streptococci (Enterococci)	IS 14988 (Part 1) / ISO 11290 (Part 1)	Qualitative(Present or Absent/g)
		Listeria monocytogenes	IS 14988 (Part 1) / ISO 11290 (Part 1)	Qualitative(Present or Absent/25g)
7.	Beverages (Non-Alcoholic, Carbonated)	Total Plate Count	IS 5402 / ISO 4833	≥ 1 cfu / ml
		Yeast and Mould count	IS 5403/ ISO 21527 (Part 1)/ ISO 21527 (Part 2)	≥ 1 cfu / ml or 250 ml

Vivek Vardhan
Convenor

Alok Jain
Program Director

Laboratory Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7613 (in lieu of T-3098, T-3099, T-3746) **Page 5 of 34**

Validity 22.08.2018 to 21.08.2020 **Last Amended on --**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		E.coli (Thermotolerant bacteria)	IS 5887 (Part 1)	Qualitative(Present or Absent / ml)
		Coliform Count	IS 5401 (Part 1) / ISO 4832 / IS 5401 (Part 2)	≥ 1 cfu / ml
		Salmonella sp.	IS 5887 (Part 3)/ ISO 6579	Absent/ 100ml
		S. aureus	IS 5887 (Part 2) / IS 5887 (Part 8 /Sec.I)	Qualitative(Present / Absent / ml ≥ 1 cfu / ml or 250ml)
		Shigella sp.	IS 5887 (Part 7), RA 2013	Qualitative(Present / Absent/ 25ml or 250ml)
		Vibrio cholerae	IS 5887 (Part 5)	Qualitative(Present / Absent / 25ml or 250ml)
		Vibrio parahaemolyticus	IS 5887 (Part 5)	Qualitative(Present / Absent / 25ml or 250ml)
		Sulphite reducing anaerobes	Ann. C of IS 13428	Qualitative(Present or Absent/50ml)
		Faecal streptococci (Enterococci)	IS 5887 (Part 2)	Qualitative(Present or Absent/50ml)
		Pseudomonas aeruginosa	Ann. D of IS 13428	Qualitative(Present or Absent/50ml)
8.	Bakery & Confectionery products	Total Plate Count	IS 5402 / ISO 4833	≥ 10 cfu /g
		Yeast and Mould count	IS 5403 / ISO 21527 (Part 1) / ISO 21527 (Part 2)	≥ 10 cfu /g
		E.coli	IS 5887 (Part 1),RA 2013	Qualitative(Present or Absent/g)
		Total Coliform Count	IS 5401 (Part 1) RA 2012 / ISO 4832	≥ 10 cfu /g

Vivek Vardhan
Convenor

Alok Jain
Program Director

Laboratory Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7613 (in lieu of T-3098, T-3099, T-3746) **Page 6 of 34**

Validity 22.08.2018 to 21.08.2020 **Last Amended on --**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Salmonella sp.	IS 5887 (Part 3)	Qualitative(Present or Absent/25g)
		Shigella sp.	IS 5887 (Part 7) RA 2013	Qualitative(Present or Absent/25g)
		S. aureus	IS 5887 (Part 2) RA 2013) / IS 5887 (Part 8/ Sec.I) / ISO 6888 (Part 1)	Qualitative(Present or Absent/g) ≥ 10 cfu /g
		Bacillus cereus	IS 5887 (Part 6)	≥ 10 cfu /g
		Listeria monocytogenes	IS 14988 (Part 1) / ISO 11290 (Part 1)	Qualitative(Present or Absent /25g)
		Clostridium perfringens	IS 5887 (Part 4)	Qualitative(Present or Absent/25g)
9.	Infant food	Total Plate Count	IS 5402 / ISO 4833	≥ 10 cfu /g ≥ 10 cfu /g
		Total Coliform Count	IS 5401 (Part 1)	≥ 10 cfu /g
		Yeast and Mould count	IS 5403 / IS 16069 (Part 2) / ISO 21527 (Part 1)/ ISO 21527 (Part 2)	≥ 10 cfu /g ≥ 10 cfu /g
		Salmonella sp.	IS 5887 (Part 3)/ ISO 6579	Qualitative(Present or Absent / 25 g)
		S. aureus	IS 5887 (Part 2) / IS 5887 (Part 8/ Sec.I) / ISO 6888 (Part 1)	Qualitative(Present or Absent/g) ≥ 10 cfu /g
		Shigella sp.	IS 5887 (Part 7)	Qualitative(Present or Absent / 25 g)
		Listeria monocytogenes	IS 14988 (Part 1) / ISO 11290 (Part 1)	Qualitative(Present or Absent / 25 g)
		E.coli	IS 5887 (Part 1)	Qualitative(Present or Absent/g)
		Enterobacteriaceae	ISO 21528 (Part 2)	≥ 10 cfu /g
		Cronobacter sakazakii (E.sakazakii)	ISO 22964	Qualitative(Present or Absent/g)

Laboratory Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7613 (in lieu of T-3098, T-3099, T-3746) **Page 7 of 34**

Validity 22.08.2018 to 21.08.2020 **Last Amended on --**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
10.	Nuts & Nut Products (Raw & Processed)	Total Plate Count	IS 5402 / ISO 4833	≥ 10 cfu /g
		Yeast and Mould count	IS 5403 / ISO 21527 (Part 1)/ ISO 21527 (Part 2)	≥ 10 cfu /g
		E.coli	IS 5887 (Part 1)	Qualitative(Present or Absent/g)
		Coliform Count	IS 5401 (Part 1)/ ISO 4832	≥ 10 cfu /g
		S.aureus	IS 5887 (Part 2) / IS 5887 (Part 8/Sec.I)	Qualitative(Present or Absent/g) ≥ 10 cfu /g
		Listeria monocytogenes	IS 14988 (Part 1)	Qualitative(Present or Absent / 25 g)
		Shigella sp.	IS 5887 (Part 7)	Qualitative(Present or Absent /25g)
		Clostridium perfringens	IS 5887(Part 4)	Qualitative(Present or Absent / 25 g)
		Vibrio cholerae & V.parahaemolyticus	IS 5887 (Part 5)	Qualitative(Present or Absent / 25 g)
		Salmonella sp.	IS 5887 (Part 3) / ISO 6579	Qualitative(Present or Absent/25g)
11.	Milk & Dairy Products	Total Plate Count	IS 5402 / ISO 4833	≥ 10 cfu /g
		Yeast and Mould count	IS 5403 / ISO 21527 (Part 1) / ISO 21527 (Part 2)	≥ 10 cfu /g ≥ 10 cfu /g
		E.coli	IS 5887 (Part 1)	Qualitative(Present or Absent/g)
		Total Coliform Count	IS 5401 (Part 1) / ISO 4832	≥ 10 cfu /g
		Salmonella sp.	IS 5887 (Part 3) / ISO 6579	Qualitative(Present or Absent/25g)
		S. aureus	IS 5887 (Part 2) / IS 5887 (Part 8/Sec.I) / ISO 6888 (Part 1)	Qualitative(Present or Absent/g) ≥ 10 cfu /g
		Shigella sp.	IS 5887 (Part 7)	Qualitative(Present or Absent/25g)

Vivek Vardhan
Convenor

Alok Jain
Program Director

Laboratory Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7613 (in lieu of T-3098, T-3099, T-3746) **Page 8 of 34**

Validity 22.08.2018 to 21.08.2020 **Last Amended on --**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Clostridium perfringens	IS 5887 (Part 4)	Qualitative(Present or Absent / 25 g)
		Listeria monocytogenes	IS 14988 (Part 1) / ISO 11290 (Part 1)	Qualitative(Present or Absent/25g)
		Mesophilic aerobic spore count (Bacillus cereus)	IS 5887 (Part 6)	≥ 10 cfu /g
		Anaerobic spore count (Clostridium perfringens)	IS 5887 (Part 4)	≥ 10 cfu /g
		Accelerated storage Test	IS 1166 Appendix E	Qualitative (Pass / Fail)
		Vibrio cholerae & V.parahemolyticus	IS 5887 (Part 5)	Qualitative (Present or Absent/25g)
		Lactic Acid Bacteria (mesophilic)	IS 16068 / ISO 15214	≥ 10 cfu /g
		Enterobacteriaceae	IS / ISO 7402 / ISO 21528 (Part 2)	≥ 10 cfu /g
		Cronobacter sakazakii (E.sakazakii)	ISO 22964	Qualitative(Present or Absent/g)
12.	Food Additives & Preservatives (Food colours, acidity regulators, antioxidants, Flavour enhancer)	Total Plate Count	IS 5402 / ISO 4833	≥ 10 cfu /g
		Yeast and Mould count	IS 5403 / ISO 21527 (Part 1) / ISO 21527 (Part 2)	≥ 10 cfu /g
		Salmonella sp.	IS 5887 (Part 3) / ISO 6579	Qualitative(Present or Absent/25g)
		E.coli	IS 5887 (Part 1)	Qualitative(Present or Absent/g)
		S. aureus/ Coagulase-positive staphylococci	IS 5887 (Part 2) / IS 5887 (Part 8/Sec.I) / ISO 6888 (Part 1)	Qualitative(Present or Absent/g) ≥ 10 cfu /g
		Enterobacteriaceae	ISO 21528 (Part 2)	≥ 10 cfu /g
		Faecal streptococci (Enterococci)	IS 5887 (Part 2)	Qualitative(Present or Absent/g)
		Anaerobic spore count (Clostridium perfringens)	IS 5887 (Part 4)	≥ 10 cfu /g

Vivek Vardhan
Convenor

Alok Jain
Program Director

Laboratory Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7613 (in lieu of T-3098, T-3099, T-3746) **Page 9 of 34**

Validity 22.08.2018 to 21.08.2020 **Last Amended on --**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Listeria monocytogens	IS 14988 (Part 1) / ISO 11290 (Part 1)	Qualitative(Present or Absent/25g)
		Clostridium perfringens	IS 5887 (Part 4)	Qualitative(Present or Absent/25g)
		Total Coliform Count	IS 5401 (Part 1) / ISO 4832	≥ 10 cfu /g
13.	Gelatin, and other Gums	Total Plate Count	IS 5402 / ISO 4833	≥ 10 cfu /g
		Yeast and Mould count	IS 5403 / ISO 21527 (Part 1)/ ISO 21527 (Part 2)	≥ 10 cfu /g
		Salmonella sp.	IS 5887 (Part 3) / ISO 6579	Qualitative(Present or Absent/25g)
		E.coli	IS 5887 (Part 1)	Qualitative(Present or Absent/g)
		S. aureus/ Coagulase-positive staphylococci	IS 5887 (Part 2) / IS 5887 (Part 8/Sec.I) / ISO 6888 (Part 1)	Qualitative(Present or Absent/g)
		Enterobacteriaceae	ISO 21528 (Part 2)	≥ 10 cfu /g
		Faecal streptococci (Enterococci)	IS 5887 (Part 2)	Qualitative(Present or Absent/g)
		Anaerobic spore count (Clostridium perfringens)	IS 5887 (Part 4)	≥ 10 cfu /g
		Listeria monocytogens	IS 14988 (Part 1) / ISO 11290 (Part 1)	Qualitative(Present or Absent/25g)
		Clostridium perfringens	IS 5887 (Part 4)	Qualitative(Present or Absent / 25 g)
		Coliform Count	IS 5401 (Part 1) / ISO 4832	≥ 10 cfu /g
14.	Meat & Meat Products	Total Plate Count	IS 5402 / ISO 4833	≥ 10 cfu /g
		Yeast and Mould count	IS 5403 / ISO 21527 (Part 1)/ ISO 21527 (Part 2)	≥ 10 cfu /g
		E.coli	IS 5887 (Part 1) RA 2013	Qualitative(Present or Absent/g)

Laboratory Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7613 (in lieu of T-3098, T-3099, T-3746) **Page 10 of 34**

Validity 22.08.2018 to 21.08.2020 **Last Amended on --**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Total Coliform Count	IS 5401 (Part 1)/ ISO 4832	≥ 10 cfu /g
		S. aureus/ Coagulase-positive staphylococci	IS 5887 (Part 2) / IS 5887 (Part 8/ Sec.I) / ISO 6888 (Part 1)	Qualitative(Present or Absent/g) ≥ 10 cfu /g
		Salmonella sp.	IS 5887 (Part 3) / ISO 6579	Qualitative(Present or Absent/25g)
		Lactic Acid Bacteria (mesophilic)	IS 16068 / ISO 15214	≥ 10 cfu /g
		Listeria monocytogenes	IS 14988 (Part 1)/ ISO 11290 (Part 1)	Qualitative(Present or Absent/25g)
		Clostridium perfringens	IS 5887 (Part 4)	Qualitative(Present or Absent / 25 g)
		Bacillus cereus	IS 5887 (Part 6)	≥ 10 cfu /g
		Shigella sp.	IS 5887 (Part 7)	Qualitative(Present or Absent/25g)
		Enterobacteriaceae	ISO 21528 (Part 2)	≥ 10 cfu /g
15.	Essential Nutrients including vitamins	Total Plate Count	IS 5402 / ISO 4833	≥ 10 cfu /g
		Yeast and Mould count	IS 5403	≥ 10 cfu /g
		Salmonella sp.	IS 5887 (Part 3)/ ISO 6579	Qualitative(Present or Absent/25g)
		Enterobacteriaceae	ISO 21528 (Part 2)	≥ 10 cfu /g
		Cronobacter sakazakii E.sakazakii)	ISO 22964	Qualitative(Present or Absent/g)
16.	Egg & Egg Products	Total Plate Count	IS 5402 / ISO 4833	≥ 10 cfu /g
		Yeast and Mould count	IS 5403 / ISO 21527 (Part 1)/ ISO 21527 (Part 2)	≥ 10 cfu /g
		Salmonella sp.	IS 5887 (Part 3) / ISO 6579	Qualitative(Present or Absent/25g)
		Total Coliform Count	IS 5401 (Part 1) / ISO 4832	≥ 10 cfu /g
		E.coli	IS 5887 (Part 1)	Qualitative(Present or Absent/g)

Laboratory **Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat**

Accreditation Standard **ISO/IEC 17025: 2005**

Certificate Number **TC-7613 (in lieu of T-3098, T-3099, T-3746)** Page 11 of 34

Validity **22.08.2018 to 21.08.2020** Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
17.	Proprietary Food (Nutritional supplements, Whey Protein, Vinegar, Cereal products, assorted candies, Noodles, Beverages, Energy drinks)	Total Plate Count	IS 5402 / ISO 4833	≥ 10 cfu /g
		Total Coliform Count	IS 5401 (Part 1) / ISO 4832	≥ 10 cfu /g
		Yeast and Mould count	IS 5403 / ISO 21527 (Part 1)/ ISO 21527 (Part 2)	≥ 10 cfu /g
		E.coli	IS 5887 (Part 1)	Qualitative(Present or Absent/g)
		Salmonella sp.	IS 5887 (Part 3)/ ISO 6579	Qualitative(Present or Absent/25g)
		S. aureus/ Coagulase-positive staphylococci	IS 5887 (Part 2) / IS 5887 (Part 8/Sec.I)/ ISO 6888 (Part1)	Qualitative(Present or Absent/g)
		Shigella sp.	IS 5887 (Part 7)	≥ 10 cfu /g Qualitative(Present or Absent/25g)
		Listeria monocytogenes	IS 14988 (Part 1)/ ISO 11290 (Part 1)	Qualitative(Present or Absent/25g)
		Vibrio cholerae & V.parahemolyticus	IS 5887 (Part 5) RA 2013	Qualitative(Present or Absent/25g)
		Clostridium perfringens	IS 5887(Part 4)	Qualitative(Present or Absent / 25 g)
	Mesophillic aerobic spore count (B.cereus)	IS 5887 (Part 6)	≥ 10 cfu /g	
	Anaerobic spore count (Clostridium perfringens)	IS 5887 (Part 4)	≥ 10 cfu /g	
III.	DRUGS AND PHARMACEUTICALS			
1.	API, Injection, Ointment & Eye Drops (Gentamycin)	Antibiotic Assay	IP 2018, Cl. 2.2.10 P 50 59, Method A	90-120%
2.	API, Injection, Ointment & Eye Drops (Neomycin)	Antibiotic Assay	IP 2018, Cl. 2.2.10 P 50 59, Method A	90-120%

Laboratory Hitech Healthcare Laboratory and Research Centre, 201, Sahaj
Arcade, Science City Road, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7613 (in lieu of T-3098, T-3099, T-3746) Page 12 of 34

Validity 22.08.2018 to 21.08.2020 Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
3.	Tablets, Syrups & Injection (Vitamin B12 (Cynocobalamin))	Microbiological Assay	Inhouse method HTL/WI-TST/B/P/016 (E. coli mutant as test organism, ATCC 14169)	90-250%
4.	Raw & finished Materials	Total aerobic Viable count	I.P. 2018 , cl-2.2.9, P 38-50	≥ 10 cfu /g or ml
		E.coli	I.P. 2018 , cl-2.2.9, P 38-50	Qualitative(Present / Absent per gm or ml)
		Salmonella sp.	I.P. 2018 , cl-2.2.9, P 38-50	Qualitative(Present / Absent Per 10 gm or 10 ml)
		Pseudomonas aeruginosa	I.P. 2018 , cl-2.2.9, P 38-50	Qualitative(Present / Absent per gm or ml)
		Shigella sp.	I.P. 2018 , cl-2.2.9, P 38-50	Qualitative(Present / Absent per gm or ml)
		Clostridia	I.P. 2018 , cl-2.2.9, P 38-50	Qualitative(Present / Absent per gm or ml)
		Staphylococcus aureus	I.P. 2018 , cl-2.2.9, P 38-50	Qualitative(Present / Absent per gm or ml)
		Candida albicans/Total fungal Count	I.P. 2018 , cl-2.2.9, P 38-50	Qualitative(Present / Absent per gm or ml)

***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.**

Laboratory **Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat**

Accreditation Standard **ISO/IEC 17025: 2005**

Certificate Number **TC-7613 (in lieu of T-3098, T-3099, T-3746)** Page 13 of 34

Validity **22.08.2018 to 21.08.2020** Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
<u>CHEMICAL TESTING</u>				
I.	WATER			
1.	Packaged Drinking Water, Packaged Natural Mineral water, Surface Water, Ground Water, Drinking Water, Construction Water, Swimming Pool Water, Industrial Water, Irrigation water, Water from purifiers	Colour	IS 3025 (Part 4), RA 2002	1 to 500 Hazen unit
		Odour	IS 3025 (Part 5), RA 2002	Qualitative (Agreeable/Disagreeable)
		Taste	IS 3025 (Part 8), RA 2002	Qualitative (Agreeable/Disagreeable)
		Turbidity	IS 3025 (Part 10), RA 2002	0.1 to 1000 NTU
		Total dissolved solids	IS 3025 (Part 16), RA 2006	5 to 500 mg/l 500 to 5000 mg/l
		pH	IS 3025 (Part 11), RA 2002	02 to 12
		Barium (as Ba)	Annex F of IS 13428	0.25 to 200 mg/l
		Chloride (as Cl)	IS 3025 (Part 32), RA 2003 [Argenometric Method]	0.5 to 2000 mg/l
		Alkalinity	IS 3025 (Part 23), RA 2003	0.5 to 2000 mg/l
		Calcium (as Ca)	IS 3025 (Part 40), RA 2003	0.1 to 2000 mg/l
		Magnesium (as Mg)	IS 3025 (Part 46), RA 2003	0.1 to 2000 mg/l
		Residual free chlorine	IS 3025 (Part 26), RA 2003	0.05 to 20 mg/l
		Nitrate (as NO ₃)	IS:3025 (Part 34), RA 2003 / APHA 23 rd Ed. 4500 NO ₃ B	1.0 to 1000 mg/l 0.1 to 5 mg/l
		Nitrite (as NO ₂)	IS:3025 (Part 34), RA 2003	0.01 to 50 mg/l
	Sulphide (as H ₂ S)	IS:3025 (Part 29), RA 2003 / APHA 23 rd Ed. 4500 S D,F	0.01 to 50 mg/l	
	Phenolic Compounds	IS 3025 (Part 43), RA 2003	0.01 to 50 mg/l	
	Mineral Oil	IS 3025 (Part 39), By (FTIR)	0.05 to 100 mg/l	
	Anionic surface active agents	Annex K of IS 13428	0.1 to 20 mg/l	

Laboratory Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7613 (in lieu of T-3098, T-3099, T-3746) **Page 14 of 34**

Validity 22.08.2018 to 21.08.2020 **Last Amended on --**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Borates	Annex H of IS 13428	0.5 to 50 mg/l
		Cyanide	IS 3025 (Part 27), RA 2009	0.01 to 50 mg/l
		Sulphate	IS: 3025 (Part 24), RA 2003 [Turbidity method]	0.5 to 2000 mg/l
		Total Hardness (as CaCO ₃)	IS:3025 (Part 21), RA 2009	1 to 5000 mg/l
		Fluoride (as F)	IS 3025 (Part 60) / APHA 23 rd Ed. 4500 F ⁻ D	0.10 to 50 mg/l
		Bromates (as BrO ₃)	ISO 15061:2001	0.0025 to 20 mg/l
		Total Suspended Solids	IS 3025 (Part 17), RA 2012 /APHA 23 rd Ed. 2540 D/CPCB Manual SOP No. HTL/WI TST/C/155, Issue No. 01	5 to 2000 mg/l
		Silica	APHA 23 rd Ed. 4500 SiO ₂ (SOP No. HTL/WI TST/C/210, Issue No. 01)	0.2 to 200 mg/l
		Phosphorous	IS 3025 (Part 31), RA 2003 /APHA 23 rd Ed. 4500 P (SOP No. HTL/WI TST/C/207, Issue No. 01)	0.1 to 500 mg/l
		Potassium	IS 3025 (Part 45), RA 2003 /APHA 23 rd Ed 3500 K	1 to 500 mg/l
		Electric Conductance	APHA 23 rd Ed. / IS 3025 (Part 14)	5 to 5000 mho/cm
		Molybdenum (as Mo)	USEPA Method 7010, 2007	0.002 to 5.0 mg/l
		Fluoride (as F ⁻)	FSSAI Manual of Methods of Analysis of foods "Water"2016, Page no. 171, (By Ion Chromatography) (SOP No. HTL/WI TST/C/284)/ USEPA 300.1	0.05 to 100 mg/l
		Chloride (as Cl ⁻)		0.10 to 2000 mg/l
		Nitrite (as NO ₂ ⁻)		0.01 to 50 mg/l
		Bromide (as Br ⁻)		0.10 to 50 mg/l
		Nitrate (as NO ₃ ⁻)		0.05 to 100 mg/l
		Phosphate (as PO ₄ ⁻)	USEPA 300.1	0.05 to 100 mg/l
		Sulphate (as SO ₄ ⁻)		0.05 to 100 mg/l

Vivek Vardhan
Convenor

Alok Jain
Program Director

Laboratory Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7613 (in lieu of T-3098, T-3099, T-3746) **Page 15 of 34**

Validity 22.08.2018 to 21.08.2020 **Last Amended on --**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
II.	RESIDUES IN WATER			
	Trace Metal Elements			
		Antimony	Annex G of IS 13428/ IS 15303/ USEPA 200.9	0.002 to 100 mg/l
		Aluminum	IS 3025 (Part 55)	0.01 to 10 mg/l
		Silver	Annex J of IS 13428/ USEPA 200.9	0.002 to 50 mg/l
		Manganese (as Mn)	IS 3025 (Part 59)	0.025 to 10 mg/l
		Zinc (as Zn)	IS 3025 (Part 49), RA 2003	0.02 to 50 mg/l
		Copper (as Cu)	IS 3025 (Part 42), RA 2003 /USEPA 200.9	0.002 to 20 mg/l
		Iron (as Fe)	IS 3025 (Part 53)	0.01 to 50 mg/l
		Selenium (as Se)	IS 3025 (Part 56)/ USEPA 200.9	0.002 to 20mg/l
		Mercury (as Hg)	IS 3025 (Part 48), RA 2003	0.0005 to 20 mg/l
		Sodium (as Na)	IS 3025 (Part 45), RA 2003	1 to 2000 mg/l
		Cadmium (as Cd)	IS 3025 (Part 41) RA 2003/ USEPA 200.9	0.0005 to 10 mg/l
		Arsenic (as As)	IS 3025 (Part 37)RA 2003/ USEPA 200.9	0.002 to 20 mg/l
		Lead (as Pb)	IS 3025 (Part 47), RA 2009/ USEPA 200.9	0.002 to 20 mg/l
		Chromium (as Cr)	Annex. J of IS 13428/ USEPA 200.9	0.005 to 20 mg/l
		Nickel (as Ni)	Annex. L of IS 13428/ USEPA 200.9	0.005 to 20 mg/l
	PAH (Polynuclear/Polycyclic Aromatic Hydrocarbons)			
		Naphthalene	As per SOP No.: HTL/WI- TST/C/040, Issue No. 01, (APHA 23 rd Ed. 6440, EPA 525.2)	0.01 to 100 µg/l
		Acenaphthylene		
		2-Bromonaphthalene		
		Acenaphthene		
		Fluorene		

Laboratory Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7613 (in lieu of T-3098, T-3099, T-3746) **Page 16 of 34**

Validity 22.08.2018 to 21.08.2020 **Last Amended on --**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Anthracene		
		Phenanthrene		
		Fluoranthene		
		Pyrene		
		Benz[a]anthracene		
		Chrysene		
		Benzo[b]fluoranthene		
		Benzo[a]pyrene		
		Indeno[1,2,3-cd]pyrene		
		Dibenz[a,h]anthracene		
		Benzo[g,h,i]perylene		
		PCBs (Polychlorinated Biphenyl)		
		PCB-(BZ #28)	As per SOP No.: HTL/WI-TST/C/040, Issue No. 01, (APHA 23 rd Ed. 6440, EPA 525.2)	0.01 to 100 µg/l
		PCB-(BZ #52)		
		PCB-(BZ #101)		
		PCB-(BZ #153)		
		PCB-(BZ #138)		
		PCB-(BZ #180)		
		Pesticides Residues		
		O,P-DDD	As per SOP No.: HTL/WI-TST/C/041, Issue No. 01, (USEPA 508, 1657A, 525.2, 8141A, 507, 527)-	0.025 to 50 µg/l
		O,P' DDT		0.025 to 50 µg/l
		O,P' DDE		0.025 to 50 µg/l
		P,P' DDD		0.025 to 50 µg/l
		P,P' DDT		0.025 to 50 µg/l
		P,P' DDE		0.025 to 50 µg/l
		Lindane		0.025 to 50 µg/l
		a-HCH		0.01 to 50 µg/l
		b-HCH		0.01 to 50 µg/l
		d-HCH		0.025 to 50 µg/l

Vivek Vardhan
Convenor

Alok Jain
Program Director

Laboratory **Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat**

Accreditation Standard **ISO/IEC 17025: 2005**

Certificate Number **TC-7613 (in lieu of T-3098, T-3099, T-3746)** Page 17 of 34

Validity **22.08.2018 to 21.08.2020** Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Endosulfan - A		0.025 to 50 µg/l
		Endosulfan - B		0.025 to 50 µg/l
		Endosulfan Sulphate		0.025 to 50 µg/l
		Ethion		0.025 to 50 µg/l
		Chlorpyrifos		0.025 to 50 µg/l
		Butachlor		0.025 to 50 µg/l
		Phorate		0.025 to 50 µg/l
		Phorate Sulfone		0.025 to 50 µg/l
		Alachlor		0.025 to 50 µg/l
		Atrazine		0.025 to 50 µg/l
		Malathion		0.025 to 50 µg/l
		Aldrin		0.025 to 50 µg/l
		Dieldrin		0.025 to 50 µg/l
		Methyl Parathion	As per SOP No.: HTL/WI-TST/C/042, Issue No. 01, (USEPA 8141A, 527)	0.025 to 50 µg/l
		Malaoxon		0.025 to 50 µg/l
		Methyl Paraoxon		0.025 to 50 µg/l
		Monocrotophos		0.05 to 50 µg/l
		Phorate Sulphoxide		0.05 to 50 µg/l
		Isoproturon	As per SOP No.: HTL/WI-TST/C/043/A, Issue No. 01, (USEPA 532)	0.05 to 50 µg/l
		2,4-D	As per SOP No.: HTL/WI-TST/C/043, Issue No. 01, (USEPA 555, 515.1)	0.05 to 50 µg/l
II.	FOOD AND AGRICULTURAL PRODUCTS			
1.	Namkeen, Bhujia, Waffers, Chips, Murmure, Chiwda, Chawana, Khakhra, Chakri,	Moisture	Annex B of IS : 15271, RA 2009	0.2% to 20%
		Acid insoluble ash	Annex C of IS : 15271, RA 2009	0.01% to 1%

Vivek Vardhan
Convenor

Alok Jain
Program Director

Laboratory Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7613 (in lieu of T-3098, T-3099, T-3746) **Page 18 of 34**

Validity 22.08.2018 to 21.08.2020 **Last Amended on --**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Sev, Fried Chana Dal & Moong Dal, Fried Ground nut	Fat	Annex D of IS : 15271, RA 2009	0.5 to 70%
		Acid Value of extracted fat	Annex E of IS:15271, RA 2009	0.1 to 5
2.	Biscuits	Moisture	Appendix B of IS :1011, RA 2009	0.2 to 25%
		Acid insoluble ash	Appendix C of IS :1011, RA 2009	0.01 to 1%
		Acidity of extracted fat	Appendix D of IS :1011, RA 2009	0.2 to 5%
3.	Oil and Fats	Moisture	IS 548 (Part 1), RA 2010	0.01 to 5%
		Free fatty acid	IS 548 (Part 1), RA 2010	0.01 to 15%
		Acid value	IS 548 (Part 1), RA 2010	0.02 to 25
		Saponification value	IS 548 (Part 1), RA 2010	100 to 250
		Unsaponifiable Matter	IS 548 (Part 1), RA 2010	0.1 to 20 %
		Reichert Missel Value	IS 548 (Part 1), RA 2010	10 to 40
		Boudin Test	IS 548 (Part 1), RA 2010	Qualitative (Present/Absent)
		Insoluble Impurities	IS 548 (Part 1), RA 2010	0.01 to 20 %
		Test for Mineral Oil	IS 548 (Part 2), RA 2010	Qualitative (Present/Absent)
		Iodine value	IS 548 (Part 1), RA 2010	5 to 200
		Peroxide value	IS 548 (Part 1), RA 2010	0.5 to 20 mEq/ Kg
		Specific gravity	IS 548 (Part 1), RA 2010	0.5 to 1.3 gm/ml
		Refractive index	IS 548 (Part 1), RA 2010	1.3 to 1.8
	Test for the Presence of Cotton Seed Oil	FSSAI Manual of Methods of Analysis of foods "Oil and fat" 2016, Method 16.0	Qualitative (Present/Absent)	
	Test for the Presence of Argemone Oil	FSSAI Manual of Methods of Analysis of foods "Oil and fat" 2016, Method 30.0, Page no. 70	Qualitative (Present/Absent)	

Laboratory Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7613 (in lieu of T-3098, T-3099, T-3746) **Page 19 of 34**

Validity 22.08.2018 to 21.08.2020 **Last Amended on --**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
4.	Iodized Salt / Common Salt/ Iron Fortified salt	Moisture	Annex-A of IS 7224/ IS 253	0.1 to 5%
		Water Insoluble Matter	Annex-C of IS 7224 / IS:253, RA 2009	0.1 to 5%
		Chloride Content (as NaCl)	Annex-D of IS 7224/ IS:253, RA 2009	0.5 to 100%
		Matter Soluble in water other than NaCl	Annex-E of IS 7224 / IS:253, RA 2009	0.1 to 5%
		Calcium	Annex-F of IS 7224	0.01 to 2%
		Magnesium	Annex-F of IS 7224	0.01 to 2%
		Sulphate	Annex-G of IS 7224	0.01 to 2%
		Iodine content	Annexure B of IS 16232/ Annexure H of IS 7224	10 to 200 mg/kg
		pH	Annexure C of IS 16232	2 to 12
		Phosphorus (as P ₂ O ₅)	Annexure D of IS 16232	100 to 5000 mg/kg
		Sodium hexa meta phosphate (as P ₂ O ₅)	Annexure E of IS 16232	0.1 to 5 %
		Alkalinity (as Na ₂ CO ₃)	Annexure J of IS 7224	0.02 to 2 %
		Ferrocyanide (as [K ₄ Fe(CN) ₆].3H ₂ O)	Annexure A of IS 7224	Qualitative
Lead (as Pb)	Annexure K of IS 7224/ FSSAI Manual of Methods of Analysis of foods "Metals"2016	0.05 to 50 mg/kg		
Arsenic (as As)	Annexure L of IS 7224/ FSSAI Manual of Methods of Analysis of foods "Metals"2016	0.05 to 50 mg/kg		
Iron content (as Fe)	Annexure A of IS 16232/ Annexure M of IS 7224/ Annexure L of IS 7224/ FSSAI Manual of Methods of Analysis of foods "Metals" 2016	10 to 500 mg/kg		

Laboratory Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7613 (in lieu of T-3098, T-3099, T-3746) **Page 20 of 34**

Validity 22.08.2018 to 21.08.2020 **Last Amended on --**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
5.	Honey	Optical Density at 660 nm	Ann. H of IS 4941, RA 2002	0.01 to 1.0
		Specific Gravity	Ann. A of IS 4941, RA 2002	0.60 to 2.0
		Ash	Ann. D of IS 4941, RA 2002	0.1 to 20 %
		Refractive Index	Ann. B of IS 4941, RA 2002	1.3 to 1.7
		colour	IS 4941, RA 2002	Qualitative (Visual Observation)
		Acidity as Formic acid	Ann. E of IS 4941, RA 2002	0.01 to 10 %
		Moisture	Ann. B of IS 4941, RA 2002	0.1 to 75 %
		Total Reducing Sugar	Ann. C of IS 4941, RA 2002	0.1 – 95 %
		Sucrose	DGHS Manual 4, page No 36/ Ann. C of IS 4941, RA 2002	0.1 % to 10 %
		Fructose Glucose Ratio	DGHS Manual 4, page No 36/ Ann. C of IS 4941, RA 2002	0.7 to 7
		Fiehe's test	DGHS Manual 4, page No 37/ Ann. F of IS 4941, RA 2002	Qualitative (Positive/Negative)
6.	Tea, Coffee, Instant Coffee	Moisture	IS 13853, RA 1999/ Ann. E of IS 3077, RA 1998	0.01 to 30 %
		Total Ash	Ann. F of IS 3077, RA 1998/ IS 13854, RA 1999	0.01 – 20 %
		Acid Insoluble Ash	IS 13857, RA 1998 / Ann. G of IS 3077, RA 1998	0.01 – 5 %
		Water Soluble Ash	Ann. H of IS 3077, RA 1998/ IS 13855, RA 1998	0.01 – 20 % 10 to 80 %
		Alkalinity of Water Soluble Ash	IS 13856 RA 1998/ Ann. J of IS 3077, RA 1998	0.1 to 10 %
		Water Extract	Ann. K of IS 3077, RA 1998/ IS 13862 :1999	1 to 80 %
		Petroleum Ether Extract	Ann. M IS 3077 RA 1998	0.1 to 20 %
		Iron Filling	App. H IS 3633 RA 2008	50 to 5000 mg/kg
		Crude Fibre	Cls. 9 of IS 10226 (Part 1) RA 2005	0.02 % to 20 %

Laboratory Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7613 (in lieu of T-3098, T-3099, T-3746) **Page 21 of 34**

Validity 22.08.2018 to 21.08.2020 **Last Amended on --**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
7.	Spices and Condiments (Turmeric, Cumin, Ginger and Mix Masala, Coriander Powder, Chilli Powder)	Moisture	IS 5453 (Part 2), RA 2012	0.1 to 30 %
		Alcohol Soluble Extract	IS 1797 RA 2009	0.1 to 50 %
		Cold Water Soluble Extract	IS 1797 RA 2009	0.1 – 50 %
		Total Ash	IS 1797 RA 2009	0.1 to 10 %
		Acid Insoluble Ash	IS 1797 RA 2009	0.01 to 10%
		Curcumine Content	IS 10925 RA 2012	0.1 to 10 %
		Lead Chromate	Ann. A of IS 3576	Qualitative (Present/Absent)
		Non Volatile Ether Extract	IS 1797 RA 2009	0.1 to 10 %
		Volatile Oil	FSSAI Manual of Methods of Analysis of foods “Spices and Condiments” 2016, Method 10.0, Page no. 19	0.05 % to 20 %
		Crude Fibre	FSSAI Manual of Methods of Analysis of foods “Spices and Condiments” 2016, Method 11.0, Page no. 22	0.5 % to 50 %
	Capsaicin Content	AOAC (20 th Edition) 995.03: 2016	0.1 % to 5 %	
	Total Starch	FSSAI Manual of Methods of Analysis of foods “Spices and Condiments” 2016, Method 16.5, Page no. 35	0.5 % to 75 %	
8.	Namkeen, Biscuits, Spices, Sauces, Chutney	Energy Value	UNFAO, Food Energy Method of analysis and conversion factor, Paper 77	20 to 2000 kcal
		Total Fat	Annex D of IS 15271 RA 2009/ IS 1011 RA 2009	0.5 to 70%
		Carbohydrate	UNFAO Method, Chapter 2	0.1 – 100 %
		Protein	IS 7219 RA 2005	0.1 – 40 %
		Sugar	DGHS Lab Manual 5, Sec. 2.6	0.1 – 40 %

Laboratory Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7613 (in lieu of T-3098, T-3099, T-3746) **Page 22 of 34**

Validity 22.08.2018 to 21.08.2020 **Last Amended on --**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
9.	Cereal, Food Grain, Pulses & Seeds	Rodent Hair & Excreta	FSSAI Manual of Methods of Analysis of foods "Cereal and Cereal Products" 2016, Method 1.5, Page no. 4	Qualitative (Present / Absent)
		Foreign Matter	FSSAI Manual of Methods of Analysis of foods "Cereal and Cereal Products" 2016, Method 1.3, Page no. 3	0.1 % to 10 %
		Moisture	FSSAI Manual of Methods of Analysis of foods "Cereal and Cereal Products" 2016, Method 2.0, Page no. 8	0.5 % to 25 %
		Total Ash	FSSAI Manual of Methods of Analysis of foods "Cereal and Cereal Products" 2016, Method 8.2, Page no. 14	0.05 % to 5.0 %
		Damaged Grains	IS 4333 (Part 1) RA 2012	0.1 % to 20 %
		Weeviled Grains	IS 4333 (Part 1) RA 2012	0.1 % to 20 %
		Other edible grains	IS 4333 (Part 1) RA 2012	0.1 % to 20 %
		Green Grains	IS 4333 (Part 1) RA 2012	0 to 50 %
10.	Cereal Products (Atta, Maida, Suji, Besan, Fortified atta and Mixed Flours)	Rodent Hair & Excreta	FSSAI Manual of Methods of Analysis of foods "Cereal and Cereal Products" 2016, Method 1.5, Page no. 4	Qualitative (Present / Absent)
		Microscopic examination/ Foreign Starch	FSSAI Manual of Methods of Analysis of foods "Cereal and Cereal Products" 2016, Method 13.0, Page no. 36	Qualitative (Present / Absent)
		Moisture	FSSAI Manual of Methods of Analysis of foods "Cereal and Cereal Products" 2016, Method 2.0, Page no. 8	0.5 % to 25 %

Vivek Vardhan
Convenor

Alok Jain
Program Director

Laboratory Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7613 (in lieu of T-3098, T-3099, T-3746) **Page 23 of 34**

Validity 22.08.2018 to 21.08.2020 **Last Amended on --**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Total Ash	FSSAI Manual of Methods of Analysis of foods "Cereal and Cereal Products" 2016, Method 8.2, Page no. 14	0.05 % to 10.0 %
		Ash insoluble in dilute HCl	FSSAI Manual of Methods of Analysis of foods "Cereal and Cereal Products" 2016, Method 8.3, Page no. 16	0.01 % to 3.0 %
		Added Colouring matter	FSSAI Manual of Methods of Analysis of foods "Cereal and Cereal Products" 2016, Method 18.0, Page no. 53	Qualitative (Present / Absent)
		Alcoholic Acidity expressed as H ₂ SO ₄	FSSAI Manual of Methods of Analysis of foods "Cereal and Cereal Products" 2016, Method 8.5, Page no. 18	0.05 % to 2.5 %
		Gluten	FSSAI Manual of Methods of Analysis of foods "Cereal and Cereal Products" 2016, Method 8.4, Page no. 17	1 % to 25 %
		Protein	FSSAI Manual of Methods of Analysis of foods "Cereal and Cereal Products" 2016, Method 8.7, Page no. 19	0.5 % to 50 %
		Crude Fibre	FSSAI Manual of Methods of Analysis of foods "Cereal and Cereal Products" 2016, Method 8.8, Page no. 23	0.1 % to 25 %
		Total Carbohydrate	FAO Food and Nutrition Paper 77, Page no. 12	10 % to 100.0 %
		Total Fat	FSSAI Manual of Methods of Analysis of foods "Cereal and Cereal Products" 2016, Method 14.5, Page no. 41	0.05 % to 25.0 %

Vivek Vardhan
Convenor

Alok Jain
Program Director

Laboratory **Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat**

Accreditation Standard **ISO/IEC 17025: 2005**

Certificate Number **TC-7613 (in lieu of T-3098, T-3099, T-3746) Page 24 of 34**

Validity **22.08.2018 to 21.08.2020 Last Amended on --**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Calcium/Calcium Carbonate	FSSAI Manual of Methods of Analysis of foods "Cereal and Cereal Products" 2016, Method 8.6, Page no. 18	10 mg/kg to 5000 mg/kg
		Total Energy	FAO Food and Nutrition Paper 77, Page no. 57	20 to 600 kcal/100gm
11.	Fruit and Vegetable Products (Sauces, Ketchup, Jam, Chutney, Pickles, Soup, Beverages, Pulp, Frozen Vegetables, Canned Vegetables)	Artificial Sweetening Agent (Sucralose)	FSSAI Manual of Analysis of foods "Food Additives" 2016, Method 3.1.1, Page no. 45	Qualitative (Present/Absent)
		Added Colouring Matter	FSSAI Manual of Analysis of foods "Food Additives" 2016 Method 4.2, Page no. 82	Qualitative (Present/Absent)
		pH	FSSAI Manual of Methods of Analysis of foods "Fruits and vegetable Products" 2016, Method 2.3, Page no. 11	2 to 14
		Calcium	IS 2860 RA 2008 , Cls. 12	0.05 % to 15.0 %
		Soluble Solids/ Soluble Solids on Salt Free basis (Brix)	FSSAI Manual of Methods of Analysis of foods "Fruits and vegetable Products" 2016, Method 1.6, Page no. 4	0.50% to 90 %
		Acidity/ Titratable acidity	FSSAI Manual of Methods of Analysis of foods "Fruits and vegetable Products" 2016, Method 2.4, Page no. 12	0.05 % to 10 %
		Total Solids	FSSAI Manual of Methods of Analysis of foods "Fruits and vegetable Products" 2016, Method 2.1, Page no. 10	0.5 % to 90 %

Vivek Vardhan
Convenor

Alok Jain
Program Director

Laboratory Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7613 (in lieu of T-3098, T-3099, T-3746) **Page 25 of 34**

Validity 22.08.2018 to 21.08.2020 **Last Amended on --**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Salt (as NaCl)	FSSAI Manual of Methods of Analysis of foods "Fruits and vegetable Products" 2016, Method 1.7, Page no. 9	0.05 % to 30 %
		Total Sugar	FSSAI Manual of Analysis of foods "Fruits and vegetable Products" 2016, Method 1.6.3.3 b, Page no. 7	2.0 % to 80 %
		Total Ash	FSSAI Manual of Methods of Analysis of foods "Fruits and vegetable Products" 2016, Method 5.3, Page no. 35	0.05 % to 5 %
		Acid insoluble ash	FSSAI Manual of Methods of Analysis of foods "Fruits and vegetable Products" 2016, Method 5.3, Page no. 35	0.02 % to 2 %
		Moisture	FSSAI Manual of Methods of Analysis of foods "Fruits and vegetable Products" 2016, Method 4.1, Page no. 34	0.5 % to 95 %
		Reducing Sugar	FSSAI Manual of Methods of Analysis of foods "Fruits and vegetable Products" 2016, Page no. 10	2.0 % to 80 %
		Vitamin C	FSSAI Manual of Methods of Analysis of foods "Fruits and vegetable Products" 2016, Method 2.8, Page no. 21	0.05 % to 10 %

Vivek Vardhan
Convenor

Alok Jain
Program Director

Laboratory Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7613 (in lieu of T-3098, T-3099, T-3746) **Page 26 of 34**

Validity 22.08.2018 to 21.08.2020 **Last Amended on --**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Fruit Content	FSSAI Manual of Methods of Analysis of foods "Fruits and vegetable Products" 2016, Method 2.11, Page no. 31	5.0 % to 50 %
		Starch	FSSAI Manual of Methods of Analysis of foods "Spices and Condiments" 2016, Method 16.5, Page no. 35	2.0 % to 30 %
12.	Proprietary Food (Nutritional supplements, Whey Protein, assorted candies)	Artificial Sweetening Agent (Sucralose)	FSSAI Manual of Methods of Analysis of foods "Food Additives" 2016, Method 3.0, Page no. 45	Qualitative (Present/Absent)
		Added Colouring Matter	FSSAI Manual of Methods of Analysis of foods "Food Additives" 2016, Method 4.2, Page no. 82	Qualitative (Present/Absent)
		Total Ash	FSSAI Manual of Methods of Analysis of foods "Fruits and vegetable Products" 2016, Method 5.3, Page no. 35	0.05 % to 5 %
		Acid insoluble ash	FSSAI Manual of Methods of Analysis of foods "Fruits and vegetable Products" 2016, Method 5.3, Page no. 35	0.02 % to 2 %
		Moisture	FSSAI Manual of Methods of Analysis of foods "Fruits and vegetable Products" 2016, Method 4.1, Page no. 34	0.5 % to 95 %

Vivek Vardhan
Convenor

Alok Jain
Program Director

Laboratory Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7613 (in lieu of T-3098, T-3099, T-3746) **Page 27 of 34**

Validity 22.08.2018 to 21.08.2020 **Last Amended on --**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Extraneous Matter/Foreign Matter	FSSAI Manual of Methods of Analysis of foods "Cereals and Cereals Products" 2016, Method 1.2, Page no. 2	Qualitative
		Insect Infestation and Visible fungus growth	FSSAI Manual of Methods of Analysis of foods "Cereals and Cereals Products" 2016, Method 1.2, Page no. 2	Qualitative
		Test for Salt	FSSAI Manual of Methods of Analysis of foods "Milk and Milk Products" 2016, Method 12.4, Page no.104	Qualitative
		Protein Content	FSSAI Manual of Methods of Analysis of foods "Milk and Milk Products" 2016, Method 16.4, Page no.140	2 to 95 %
		Nitrogen Content	FSSAI Manual of Methods of Analysis of foods "Milk and Milk Products" 2016, Method 16.4, Page no.140	0.5 to 18 %
		Sugar	DGHS Manual of Methods of Analysis of foods "Lab manual 4" 2005, Method 8.2, Page no. 49	1 to 90 %
		Fat	DGHS Manual of Methods of Analysis of foods "Lab manual 4" 2005, Method 13.5.A, Page no. 59	0.5 to 50 %
		Sulphated Ash	DGHS Manual of Methods of Analysis of foods "Lab manual 4" 2005, Method 13.2, Page no. 53	0.02 to 8 %

Vivek Vardhan
Convenor

Alok Jain
Program Director

Laboratory Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7613 (in lieu of T-3098, T-3099, T-3746) **Page 28 of 34**

Validity 22.08.2018 to 21.08.2020 **Last Amended on --**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
13.	Sweetening Agents, Sweets (Sugar, Refined Sugar, Bura Sugar, Jaggery or Gud, Sugar Boiled and Lozenges)	Extraneous Matter insoluble in water	DGHS Manual of Methods of Analysis of foods "Lab manual 4" 2005, Method 9.2, Page no. 49	0.5 % to 10 %
		Moisture/Loss on Drying	DGHS Manual of Methods of Analysis of foods "Lab manual 4" 2005, Method 7.2, Page no. 36	0.2 % to 15 %
		Total Sugar expressed as invert sugar	DGHS Manual of Methods of Analysis of foods "Lab manual 4" 2005, Method 7.4, Page no. 37	5 % to 100 %
		Total Ash	FSSAI Manual of Methods of Analysis of foods "Fruits and vegetable Products" 2016, Page no. 35	0.05 % to 5 %
		Acid insoluble ash	FSSAI Manual of Methods of Analysis of foods "Fruits and vegetable Products" 2016, Page no. 35	0.02 % to 2 %
		Moisture	FSSAI Manual of Methods of Analysis of foods "Fruits and vegetable Products" 2016, Page no. 34	0.5 % to 95 %
14.	Nutritional Information of Food Products (Sauces, Chutney, Cooked Food (Thepla, Dal, Mix Dal, Rice, Jeera Rice, Pulav, Matar Pulav, Khichdi, Sukadi, Cake))	Energy Value	UNFAO, Food Energy Method of analysis and conversion factor, Paper 77	5 to 800 kcal/100 gm
		Total Fat	Annex-D of IS 15271 RA 2009/IS 1011 RA 2009	0.5 to 70%
		Carbohydrate	UNFAO Method, Chapter 2	0.1 to 100 %
		Protein	IS 7219: 1973, Ra 2005, FSSAI Manual of Methods of Analysis of foods "Cereal and Cereal Products" 2016, Page no. 19	0.1 to 40 %

Laboratory Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7613 (in lieu of T-3098, T-3099, T-3746) **Page 29 of 34**

Validity 22.08.2018 to 21.08.2020 **Last Amended on --**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Sugar	FSSAI Manual of Methods of Analysis of foods "Fruits and vegetable Products" 2016, Page no. 15	0.1 % to 40 %
		Crude Fibre	FSSAI Manual of Methods of Analysis of foods "Cereal and Cereal Products" 2016, Page no. 23	0.1 % to 10 %
15.	Milk and Milk Products (Milk, Milk Powder, Curd, Paneer)	Total Solid	FSSAI Manual of Methods of Analysis of foods "Milk and Milk Products" 2016, Page no. 36	2 %to 40 %
		Milk Fat	FSSAI Manual of Methods of Analysis of foods "Milk and Milk Products"2016, Page no. 41	0.5 % to 70%
		Cane Sugar	FSSAI Manual of Methods of Analysis of foods "Milk and Milk Products" 2016, Page no. 9	Qualitative (Present/Absent)
		Starch	FSSAI Manual of Methods of Analysis of foods "Milk and Milk Products" 2016, Page no. 11	Qualitative (Present/Absent)
		Urea	FSSAI Manual of Methods of Analysis of foods "Milk and Milk Products" 2016, Page no. 13	Qualitative (Present/Absent)
		Salt	FSSAI Manual of Methods of Analysis of foods "Milk and Milk Products" 2016, Page no. 18	Qualitative (Present/Absent)
		Ammonium Compound	FSSAI Manual of Methods of Analysis of foods "Milk and Milk Products" 2016,	Qualitative (Present/Absent)

Vivek Vardhan
Convenor

Alok Jain
Program Director

Laboratory Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7613 (in lieu of T-3098, T-3099, T-3746) **Page 30 of 34**

Validity 22.08.2018 to 21.08.2020 **Last Amended on --**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			Page no. 15	
		Boric Acid and Borates	FSSAI Manual of Methods of Analysis of foods "Milk and Milk Products" 2016, Page no. 15	Qualitative (Present/Absent)
		Sulphate	FSSAI Manual of Methods of Analysis of foods "Milk and Milk Products" 2016, Page no. 16	Qualitative (Present/Absent)
		Nitrate (Pond Water)	FSSAI Manual of Methods of Analysis of foods "Milk and Milk Products" 2016, Page no. 16	Qualitative (Present/Absent)
		Neutralizers	FSSAI Manual of Methods of Analysis of foods "Milk and Milk Products" 2016, Page no. 22	Qualitative (Present/Absent)
		Anionic Detergents	FSSAI Manual of Methods of Analysis of foods "Milk and Milk Products" 2016, Page no. 26	Qualitative (Present/Absent)
		Formalin	FSSAI Manual of Methods of Analysis of foods "Milk and Milk Products" 2016, Page no. 28	Qualitative (Present/Absent)
		Milk Protein	FSSAI Manual of Methods of Analysis of foods "Milk and Milk Products" 2016, Page no. 63	0.5 % to 40 %
		Carbohydrate	FSSAI Manual of Methods of Analysis of foods "Milk and Milk Products" 2016, Page no. 89	2.0 % to 60 %

Vivek Vardhan
Convenor

Alok Jain
Program Director

Laboratory Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7613 (in lieu of T-3098, T-3099, T-3746) **Page 31 of 34**

Validity 22.08.2018 to 21.08.2020 **Last Amended on --**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Moisture	FSSAI Manual of Methods of Analysis of foods "Milk and Milk Products" 2016, Page no. 47	0.05 % to 90 %
16.	Turmeric, Cumin, Ginger and Mix Masala, Namkeen, Biscuits, Tea, Coffee, Salt	Lead	DGHS Lab Manual 9, Sec. 2 / AOAC 19th ED. 999.11	0.1 to 1000 µg/g
		Cadmium	DGHS Lab Manual 9, Sec. 2 / AOAC 19th Ed. 999.11	0.1 to 1000 µg/g
		Copper	DGHS Lab Manual 9, Sec. 2 / AOAC 19th Ed. 999.11	0.1 to 1000 µg/g
		Zinc	DGHS Lab Manual 9, Sec. 2 / AOAC 19th Ed. 999.11	0.2 to 1000 µg/g
		Iron	DGHS Lab Manual 9, Sec. 2 / AOAC 19th Ed. 985.35	01 to 1000 µg/g
III.	DRUGS AND PHARMACEUTICALS			
1.	General Test	Identification by FTIR	Indian Pharmacopeia 2018	Qualitative
		Water Content	Indian Pharmacopeia 2018, pg. no. 156	0.01 to 40 %
		Loss on Drying	Indian Pharmacopeia 2018, Method A, pg. no. 208	0.01 to 35 %
		Sulphated Ash	Indian Pharmacopeia 2018, pg. no. 140	0.01 to 10 %
		Uniformity of weight	Indian Pharmacopeia 2018, pg. no. 308	80 to 120 % of Average Weight
2.	Raw Material (Amoxiciline Trihydrate)	Assay by HPLC	Indian Pharmacopeia 2018	95 to 102 %
3.	Raw Material (Ibuprofen)	ASSAY by Titration	Indian Pharmacopeia 2018	98.5 to 101 %
4.	Finished Formulations (Amoxiciline Tablets)	Assay by HPLC	Indian Pharmacopeia 2018	90 to 120 %

Laboratory Hitech Healthcare Laboratory and Research Centre, 201, Sahaj
Arcade, Science City Road, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7613 (in lieu of T-3098, T-3099, T-3746) Page 32 of 34

Validity 22.08.2018 to 21.08.2020 Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
5.	Finished Formulations (Paracetamol Tablets)	ASSAY by UV Spectrometer	Indian Pharmacopeia 2018	95 to 105 %
IV.	PLASTICS AND RESINS			
1.	PE Films, PE Pouches, Containers for Packing of Water, Caps, Closures and Lids of Bottles, Jar and Cups, Preforms	Potability Test for odour	IS 3025 (Part 5) RA 2002	Qualitative(Agreeable/ Disagreeable)
		Potability Test for Taste	IS 3025 (Part 8) RA 2002	Qualitative(Agreeable/ Disagreeable)
		Overall Migration	IS 9845	0.5 to 100 mg/l 0.1 to 100 mg/dm ²
		Colour Migration	IS 9845	Qualitative (Visual Observation)
2.	Pouches, Films, Container, Jar and Bottles for packaging of Water	Material	FTIR (SOP No. HTL/WI-TST/C/232) ref. ASTM E 1252 - 98 (RA 2007)	Qualitative

***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**.

Laboratory Hitech Healthcare Laboratory and Research Centre, 201, Sahaj Arcade, Science City Road, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7613 (in lieu of T-3098, T-3099, T-3746) **Page 33 of 34**

Validity 22.08.2018 to 21.08.2020 **Last Amended on --**

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.	PLASTICS AND POLYMERS			
1.	Packaging and Containers (Plastic Films and Pouches)	Odour	IS 15609	Qualitative
		Thickness of film	IS 15609 IS 2508	10 to 200 µm
		Width	IS 15609	10 to 500 mm
		Tensile Strength (Length wise)	A- 4 of IS 2508	5 to 40 MPa
		Tensile Strength (Cross wise)	A- 4 of IS 2508	5 to 40 MPa
		Elongation at Break (Length Wise)	A- 4 of IS 2508	10 to 1000 %
		Elongation at Break (Cross Wise)	A- 4 of IS 2508	10 to 1000 %
		Dart Impact Resistance /Strength	A- 6 of IS 2508	Qualitative
		Stack Load	Ann. F of IS 15609	Qualitative
		Drop Test	Ann. G of IS 15609	Qualitative
		Ink Adhesion Test	Ann. H of IS 15609	Qualitative
		Product Resistance Test	Ann. J of IS 15609	Qualitative
2.		Packaging & containers (Containers, Jar, Bottles and Cups for Packing of Water)	Nominal Capacity	IS 15410
	Brimful Capacity		IS 2798	0.05 to 10.0 %
	Wall Thickness Top		IS 2798	0.01 to 2.0 mm
	Wall Thickness Middle		IS 2798	0.01 to 2.0 mm
	Wall Thickness Bottom		IS 15410 / IS 2798	0.01 to 2.0 mm
	Transparency/Opacity		IS 15410	40 to 100 %
	Leakage Test Closure		IS 2798	Qualitative
	Leakage Test Vibration		IS 2798	Qualitative

Vivek Vardhan
Convenor

Alok Jain
Program Director

Laboratory Hitech Healthcare Laboratory and Research Centre, 201, Sahaj
Arcade, Science City Road, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7613 (in lieu of T-3098, T-3099, T-3746) **Page 34 of 34**

Validity 22.08.2018 to 21.08.2020 **Last Amended on --**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Leakage Test Air Pressure	IS 2798	Qualitative
		Drop Test	IS 2798	Qualitative

Vivek Vardhan
Convenor

Alok Jain
Program Director