

Laboratory **Regional Analytical Laboratory, Malaparamba, Kozhikode, Kerala**

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

Certificate Number **TC-5566**

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Validity **08.05.2017 to 07.05.2019**

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
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### CHEMICAL TESTING

I	<b>WATER</b>			
1.	<b>Packaged Drinking Water</b>	pH value	IS: 3025 (Part 2)	4.0 to 10.0
		Alkalinity as CaCO <sub>3</sub>	IS: 3025 (Part 23)	4.0 mg/l to 500 mg/l
		Chloride	IS: 3025 (Part 32) (Argentometric method)	2.0 mg/l to 500 mg/l
		Total Dissolved Solids	IS: 3025 (Part 16)	10 mg/l to 1000 mg/l
		Calcium (as Ca)	APHA 21 <sup>st</sup> Edition Chapter 3-66, 3500 Ca B (EDTA Method)	7.0 mg/l to 100mg/l
		Magnesium (as Mg)	APHA 21 <sup>st</sup> Edition Chapter 3-84, 3500 Mg B	0.5 mg/l to 100mg/l
II	<b>FOOD AND AGRICULTURE PRODUCTS</b>			
1.	<b>Tea</b>	Total Ash	IS:13854	0.5 % to 10.0%
		Water soluble Ash	IS: 13855	20.0 % to 85.0%
		Alkalinity of water soluble ash as KOH	IS: 13856	0.5 % to 20.0%
		Water extract	FSSAI Manual Lab Manual-4	10.0 % to 50.0%
		Crude Fibre	IS:10226 Part 2	5.0 % to 30.0%
		Added Colouring matter	Lab Manual -8, FSSAI Manual of Methods of Analysis of Foods (Food Additives)	Qualitative (Present/Absent)
		Acid insoluble Ash	IS: 13857	0.02 % to 4.0%
		2.	<b>Herbs, Spices and Condiments</b>	
a.	<b>Chilly powder, coriander powder, turmeric powder</b>	Moisture	IS: 1797	0.4 % to 20.0%
		Total Ash	IS: 1797(Part-6)	0.5 % to 30.0%
		Ash Insoluble in dilute HCl	IS: 1797(Part-8)	0.05 % to 5.0%

**Ajay Kumar Sharma**  
Convenor

**N. Venkateswaran**  
Program Director

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		Chromate Test in Turmeric	IS: 3576 Annexure A	Qualitative (Present/Absent)
		Non-volatile ether extract in chilly powder	IS: 1797 (Part-14)	5.0 % to 25.0%
		Crude fibre	Lab Manual-10, FSSAI Manual of Methods of Analysis of Foods (Spices and Condiments )	10.0 % to 40.0%
		Oil soluble synthetic colour in chilly powder (TLC)	Lab Manual -8, FSSAI Manual of Methods of Analysis of Foods (Food Additives)	Qualitative (Present/Absent)
		Added colouring matter	Lab Manual -8, FSSAI Manual of Methods of Analysis of Foods (Food Additives )/ RALK/QF/5041	Qualitative (Present/Absent)
<b>3.</b>	<b>Edible oil and Fats</b>			
<b>a.</b>	<b>Coconut Oil, Gingelly Oi, Palmoil, Palmoelin, Rice Bran Oil, Sunflower Oil, Refined Vegetable Oil, Vanaspathi, Ghee</b>	Refractive Index at 40°C and Refractive Index at 50°C for palm oil.	IS: 548 (Part 1)	1.4220 to 1.4845
		Butyro-refractometer Reading at 40°C and Butyro-refractometer Reading at 50°C for palm oil	IS: 548 (Part 1)	0.1 to 90.9
		Saponification Value	IS: 548 (Part 1)	10.0 to 270.0
		Iodine value	IS: 548 (Part 1)	1.0 to 160.0
		Moisture	IS: 548 (Part 1)	0.05 % to 20.0%
		Acid value	IS: 548 (Part 1) RA 2010	0.1 to 20.0
		Polenske Value	IS: 548 (Part 1)	1.0 to 20.0
		Baudouin	IS: 548 (Part 2)	Qualitative (Positive/Negative)
		Mineral Oil	IS: 548 (Part 2)	Qualitative (Positive/Negative)
	Halphen's	IS: 548 (Part 2)	Qualitative (Positive/Negative)	

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		Moisture	IS: 548 (Part 1)	0.05 to 20.0%
		Reichert-Miessl value	IS: 548 (Part 1)	1.0 to 35.0
		Free Fatty Acid (as oleic acid)	IS: 548 (Part 1)	0.1 % to 10.0%
<b>4.</b>	<b>Milk and Dairy Products</b>			
a.	<b>Milk</b>	Fat	FSSAI Manual of Methods of Food Analysis	0.1 % to 10%
		Total Solids/SNF	FSSAI Manual of Methods of Food Analysis	3 % to 20%
		Neutralizers (Qualitative)	FSSAI Manual of Methods of Food Analysis	Qualitative (Present/Absent)
		Starch (Qualitative)	FSSAI Manual of Methods of Food Analysis	Qualitative (Present/Absent)
		Cane Sugar (Qualitative)	FSSAI Manual of Methods of Food Analysis	Qualitative (Present/Absent)
		Formaldehyde (Qualitative)	FSSAI Manual of Methods of Food Analysis	Qualitative (Present/Absent)
		Urea (Qualitative)	FSSAI Manual of Methods of Food Analysis	Qualitative (Present/Absent)
b.	<b>Ice Cream</b>	Fat	FSSAI Manual of Methods of Food Analysis	5 % to 50 %
		Total Solids	FSSAI Manual of Methods of Food Analysis	0.1 % to 20%
		Protein	AOAC 2 (Page No. 930.33 and 991.20)/Gerhardt Kjeldahl Instrumentation method	0.1 % to 10%

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