

Laboratory **Rasayan Laboratories, Lambhvel, Anand, Gujarat**

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

Certificate Number **TC-7115**

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Validity **31.05.2018 to 30.05.2020**

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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
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**CHEMICAL TESTING**

I.	ANIMAL FOOD AND FEED			
1.	Pet Foods Rapeseed Meal Cotton seed cake, Rice polish, Guar Meal Poultry feed additives Animal Nutrition Supplements Oil Cake Groundnut meal Miscellaneous, Cattle Feed, Cattle feed supplements, Soya Doc, Maize gluten	Moisture	IS 7874 (Part 1)	0.5 g/100g to 50 g/100g
		Crude Fat / Oil	IS 7874 (Part 1)	0.1 g/100g to 35 g/100g
		Crude Fiber	IS 7874 (Part 1)	0.30 g/100g to 50 g/100g
		Ash	IS 7874 (Part 1)	0.1 g/100g to 20 g/100g
		Acid Insoluble Ash / Sand Silica	IS 7874 (Part 1)	0.01 g/100g to 10 g/100g
		Protein/Nitrogen	IS 7874 (Part 1)	2 g/100g to 80 g/100g
		Phosphorous	IS 7874 (Part 2)	0.1 g/100g to 20 g/100g
		Sodium	AOAC 966.16; 20th Edition, 2016	100 mg/kg to 25000 mg/kg
		Potassium	AOAC 965.30; 20th Edition, 2016	100 mg/kg to 25000 mg/kg
		Calcium	IS 7874 (Part 2)	0.5 g/100g to 40 g/100g
		Salt (as NaCl)	IS 7874 (Part 2)	0.5 g/100g to 20 g/100g
		Carbohydrate	RL/039, Issue No.:02, Issue Date: 13.02.2018/ IS 2234	0.5 g/100g to 85 g/100g
			Calories / Metabolic Energy	RL/040, Issue No.:02, Issue Date: 13.02.2018
	Fatty acid profile:			
	total Saturated Fatty acids	AOAC 996.06; 20th Edition, 2016	0.5 g/100g to 30 g/100g	
	total Monounsaturated Fatty acids	AOAC 996.06; 20th Edition, 2016	0.5 g/100g to 30 g/100g	
	total Polyunsaturated fatty acids	AOAC 996.06; 20th Edition, 2016	0.5 g/100g to 30 g/100g	
	Trans fatty acids (Trans- 9 Elaidic Acid)	AOAC 996.06; 20th Edition, 2016	0.1 g/100g to 10 g/100g	

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		Trace elements (Heavy metals):		
		Arsenic	AOAC 986.15; 20th Edition, 2016	0.5 mg/kg to 100 mg/kg
		Lead	AOAC 999.11; 20th Edition, 2016/ FSSAI: Manual of Methods of Analysis of Foods, Metals, Cl. 3.0, Pg. 10	2 mg/kg to 100 mg/kg
		Mercury	FSSAI: Manual of Methods of Analysis of Foods, Metals, Cl. 3.2, Pg. 15	0.5 mg/kg to 100 mg/kg
		Cadmium	AOAC 999.11; 20th Edition, 2016/FSSAI: Manual of Methods of Analysis of Foods, Metals, Cl. 3.1, Pg. 10	0.5 mg/kg to 100 mg/kg
		Zinc	AOAC 999.11; 20th Edition, 2016/ FSSAI: Manual of Methods of Analysis of Foods, Metals, Cl. 3.1, Pg. 10	1.0 mg/kg to 1000 mg/kg
		Manganese	AOAC 985.35; 20th Edition, 2016	1.0 mg/kg to 500 mg/kg
		Iron	AOAC 985.35; 20th Edition, 2016 / FSSAI: Manual of Methods of Analysis of Foods, Metals, Cl. 3.1, Pg. 10	5 mg/kg to 1000 mg/kg
		Copper	AOAC 999.11; 20th Edition, 2016/ FSSAI: Manual of Methods of Analysis of Foods, Metals, Cl. 3.1, Pg. 10	5 mg/kg to 500 mg/kg

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II.	<b>FOOD AND AGRICULTURAL PRODUCTS</b>			
1.	<b>Herbs, Spices &amp; Condiments</b>	Moisture	IS 1797	0.5 g/100g to 15 g/100g
		total Ash	IS 1797	0.5 g/100g to 15 g/100g
		Acid Insoluble Ash	IS 1797	0.1 g/100g to 10 g/100g
		Non Volatile Ether Extract	IS 1797	0.1 g/100g to 25 g/100g
		Water Soluble Ash	IS 1797	0.05 g/100g to 5 g/100g
		Alcohol Soluble Extract	IS 1797	0.05 g/100g to 5 g/100g
		Cold Water Soluble Extract	IS 1797	0.05 g/100g to 15 g/100g
		Salt As NaCl	IS 1797	0.1 g/100g to 15 g/100g
		Crude Fiber	IS 1797	0.1 g/100g to 25 g/100g
		Fat (Ether extract)	IS 1797	0.5 g/100g to 25 g/100g
		Protein	IS 7219	0.5 g/100g to 60 g/100g
		Carbohydrate	RL/039, Issue No.:02, Issue Date: 13.02.2018/ IS 2234	0.5 g/100g to 75 g/100g
		Calories	RL/040, Issue No.:02, Issue Date: 13.02.2018	5 Kcal/100g to 900 Kcal/100g
	Iron	IS 14433/ AOAC 985.35; 20th Edition, 2016 / FSSAI: Manual of Methods of Analysis of Foods, Metals, Cl. 3.1, Pg.10	5 mg/kg to 3500 mg/kg	
	Calcium	AOAC 944.03; 20th Edition, 2016	1 mg/kg to 3500 mg/kg	
	Sodium	AOAC 966.16; 20th Edition, 2016	1 mg/kg to 35000 mg/kg	
	Potassium	AOAC 965.30; 20th Edition, 2016	1 mg/kg to 30000 mg/kg	
	Phosphorous	AOAC 986.24; 20th Edition, 2016	1 mg/kg to 3500 mg/kg	

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2.	<b>Cereals, Pulses and Cereals based products.</b>	Moisture	IS 1155	0.5 g/100g to 50 g/100g
		total Ash	IS 1155/ IS 1009	0.5 g/100g to 15 g/100g
		Acid Insoluble Ash	IS 1155/ IS 1009	0.1g/100g to 15 g/100g
		Crude Fiber	IS 1155	0.1 g/100g to 20 g/100g
		Fat (Ether extract)	IS 12711	0.5 g/100g to 30 g/100g
		Protein	IS 7219	0.5 g/100g to 60 g/100g
		Carbohydrate	RL/039, Issue No.:02, Issue Date: 13.02.2018/ IS 2234	0.5 g/100g to 75 g/100g
		Calories	RL/040, Issue No.:02, Issue Date: 13.02.2018	5 Kcal/100g to 900 Kcal/100g
		Iron	IS 14433 / AOAC 985.35; 20th Edition, 2016 / FSSAI: Manual of Methods of Analysis of Foods, Metals, Cl. 3.2, Pg. 16	5 mg/kg to 3500 mg/kg
		Calcium	AOAC 944.03; 20th Edition, 2016	1 mg/kg to 3500 mg/kg
		Sodium	AOAC 966.16; 20th Edition, 2016	1 mg/kg to 35000 mg/kg
		Potassium	AOAC 965.30; 20th Edition, 2016	1 mg/kg to 30000 mg/kg
		Phosphorous	AOAC 986.24; 20th Edition, 2016	1 mg/kg to 3500 mg/kg
		Gluten	IS 1155	1 g/100g to 30 g/100g
Fatty acid profile :				
total Saturated Fatty acids	AOAC 996.06; 20th Edition, 2016	0.5 g/100g to 20 g/100g		
total Monounsaturated Fatty acids	AOAC 996.06; 20th Edition, 2016	0.5 g/100g to 20 g/100g		
total Polyunsaturated fatty acids	AOAC 996.06; 20th Edition, 2016	0.5 g/100g to 70 g/100g		
Trans fatty acids (Trans- 9 Elaidic Acid)	AOAC 996.06; 20th Edition, 2016	0.1 g/100g to 5 g/100g		

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3.	Oil seeds & by-products	Moisture	IS 3579	0.5 g/100g to 50 g/100g
		total Ash	AOAC 950.49; 20th Edition, 2016	0.5 g/100g to 15 g/100g
		Acid Insoluble Ash	IS 1155	0.1 g/100g to 15 g/100g
		Crude Fiber	IS 1155	0.1 g/100g to 20 g/100g
		Fat (Ether extract)	IS 3579	0.5 g/100g to 30 g/100g
		Protein	IS 7219	0.5 g/100g to 60 g/100g
		Carbohydrate	RL/039, Issue No.:02, Issue Date: 13.02.2018/ IS 2234	0.5 g/100g to 75 g/100g
		Calories	RL/040, Issue No.:02, Issue Date: 13.02.2018	5 Kcal/100g to 900 Kcal/100g
		Iron	IS 14433/ AOAC 985.35; 20th Edition, 2016 / FSSAI: Manual of Methods of Analysis of Foods, Metals, Cl. 3.1, Pg. 10	5 mg/kg to 3500 mg/kg
		Calcium	AOAC 944.03; 20th Edition, 2016	1 mg/kg to 3500 mg/kg
		Sodium	AOAC 966.16; 20th Edition, 2016	1 mg/kg to 25000 mg/kg
		Potassium	AOAC 965.30; 20th Edition, 2016	1 mg/kg to 15000 mg/kg
		Phosphorous	AOAC 986.24; 20th Edition, 2016	1 mg/kg to 3500 mg/kg
		Fatty acid profile:		
total Saturated Fatty acids	AOAC 996.06; 20th Edition, 2016	0.1 g/100g to 50 g/100g		
total Monounsaturated Fatty acids	AOAC 996.06; 20th Edition, 2016	0.1 g/100g to 50 g/100g		
total Polyunsaturated fatty acids	AOAC 996.06; 20th Edition, 2016	0.1 g/100g to 50 g/100g		
Trans fatty acids (Trans- 9 Elaidic Acid)	AOAC 996.06; 20th Edition, 2016	0.1 g/100g to 10 g/100g		

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4.	<b>Edible Oils &amp; Fats</b>	Moisture	IS 548 (Part-1), Cl.5.1	0.1 g/100g to 15 g/100g
		Specific Gravity / Relative Density	IS 548 (Part1)	0.5 to 1.0
		Saponification Value	IS 548 (Part1)	10 to 250
		Iodine Value	IS 548 (Part1)	2 to 200
		Acid Value	IS 548 (Part1)	0.5 to 40
		Peroxide Value	IS 548 (Part1)	0.1 to 30
		Free Fatty Acid	IS 548 (Part1)	0.1 g/100g to 20 g/100g
		Fatty acid profile:		
		total Saturated Fatty acids	AOAC 963.22; 20th Edition, 2016	0.1 g/100g to 80 g/100g
		total Monounsaturated Fatty acids	AOAC 963.22; 20th Edition, 2016	0.1 g/100g to 80 g/100g
		total Polyunsaturated fatty acids	AOAC 963.22; 20th Edition, 2016	0.1 g/100g to 85 g/100g
	Trans-9 Elaidic acids	AOAC 963.22; 20th Edition, 2016	0.1 g/100g to 25 g/100g	
	Adulteration Tests; - Bt Test For Sesame Oil, -Mineral Oil Test, -Castor Oil Test, -Cotton Seed Oil Test, - Ground Nut Oil Test,	IS 548 (Part2)	Qualitative test (Positive/Negative)	
5.	<b>Coffee and Cocoa products, Roasted chicory</b>	Water Soluble Ash	IS 13855	0.1 g/100g to 50 g/100g
		Acid Insoluble Ash	IS 612 / IS 13857	0.1 g/100g to 20 g/100g
		Water Soluble Extract	IS 13862	0.1 g/100g to 80 g/100g
		total Ash	IS 612 / IS 13858	0.1 g/100g to 50 g/100g
		Moisture	IS 612	0.1 g/100g to 25 g/100g
		Water Soluble Matter	IS 612	0.1 g/100g to 80 g/100g
		Crude Fiber	IS 10226 (Part1)	0.1 g/100g to 25 g/100g
6.	<b>Tea</b>	Water Soluble Ash	IS 13855	0.1 g/100g to 50 g/100g
		Acid Insoluble Ash	IS 13857	0.1 g/100g to 20 g/100g
		Water Soluble Extract	IS 13862	0.1 g/100g to 80 g/100g
		total Ash	IS 13858	0.1 g/100g to 50 g/100g

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		Moisture	IS 612	0.1 g/100g to 25 g/100g
		Crude Fiber	IS 10226 (Part1)	0.1 g/100g to 25 g/100g
<b>7.</b>	<b>Milk And Dairy Products</b>			
<b>a.</b>	<b>Skimmed Milk Powder Standard Grade, Skimmed Milk Powder Extra Grade, Whole Milk Powder</b>	Moisture	IS 11623	0.1 g/100g to 30 g/100g
		total Solids	IS 12333	5 g/100g to 96 g/100g
		Milk Fat	IS 11721	0.1 g/100g to 20 g/100g
		total Ash	IS 14433	0.1 g/100g to 15 g/100g
		Protein	IS 7219	5.0 g/100g to 85 g/100g
<b>b.</b>	<b>Ice Cream And Frozen Dessert</b>	total Solids	IS 2802	5 g/100g to 60 g/100g
		Protein	IS 7219	0.5 g/100g to 7.0 g/100g
		Fat	IS 2802	0.1 g/100g to 20 g/100g
<b>c.</b>	<b>Milk</b>	Fat	IS 1479 (Part II)	0.5 g/100g to 15 g/100g
		Solids (total) In Milk	IS 1479 (Part II)	5 g/100g to 40 g/100g
		Solids Not Fat	IS 1479 (Part II)	0.5 g/100g to 15 g/100g
<b>d.</b>	<b>Cream</b>	Fat	IS 3509	0.5 g/100g to 70 g/100g
<b>e.</b>	<b>Shrikhand</b>	total Solids	IS 1166	5 g/100g to 70 g/100g
		Milk Fat	IS 1166	0.5 g/100g to 15 g/100g
		Milk Protein	IS 7219	0.5 g/100g to 15 g/100g
		total Ash	IS 1166	0.5 g/100g to 15 g/100g
<b>8.</b>	<b>Bakery and confectionary Products: Nameen (Farsaan), Snacks, Pickles, &amp; Ready to eat food.</b>	Moisture	IS 12711 / IS 15271	1 g/100g to 20 g/100g
		Fat (ether extract)	IS 12711 / IS 15271	0.5 g/100g to 50 g/100g
		Acidity of Extracted Fat (As oleic acid)	IS 15271 / IS 12711	0.1 g/100g to 10 g/100g
		total Ash	IS 12711	0.5 g/100g to 10 g/100g
		Protein	IS 7219	0.5 g/100g to 55 g/100g
		Potassium	AOAC 965.30; 20th Edition, 2016	50 mg/kg to 15000 mg/kg
		Iron	IS 14433 / AOAC 985.35; 20th Edition, 2016 / FSSAI: Manual of Methods of Analysis of Foods, Metals, Cl. 3.1, Pg. 10	5 mg/kg to 5000 mg/kg

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		Calcium	AOAC 944.03; 20th Edition, 2016	1 mg/kg to 3500 mg/kg
		Sodium	AOAC 966.16; 20th Edition, 2016	1 mg/kg to 35000 mg/kg
		Acid Insoluble Ash	IS 12711 / IS 15271	0.1 g/100g to 20 g/100g
		Carbohydrate	RL/039, Issue No.:02, Issue Date: 13.02.2018/ IS 2234	0.5 g/100g to 75 g/100g
		Calories / Metabolic Energy	RL/040, Issue No.:02, Issue Date: 13.02.2018	5 Kcal/100g to 900 Kcal/100g
		Crude Fiber	IS 12711	0.1 g/100g to 5 g/100g
		Fatty acid profile:		
		total Saturated Fatty acids	AOAC 996.06; 20th Edition, 2016	0.1 g/100g to 50 g/100g
		total Monounsaturated Fatty acids	AOAC 996.06; 20th Edition, 2016	0.1 g/100g to 50 g/100g
		total Polyunsaturated fatty acids	AOAC 996.06; 20th Edition, 2016	0.1 g/100g to 50 g/100g
		Trans-9 Elaidic acids	AOAC 996.06; 20th Edition, 2016	0.1 g/100g to 10 g/100g
9.	<b>Poultry &amp; poultry products: Egg Powder</b>	Fat (ether extract)	IS 4723	0.5 g/100g to 30 g/100g
		Protein	IS 7219	0.5 g/100g to 60 g/100g
10.	<b>Fruit And Fruit Products: Fresh and dehydrated fruit and fruit products</b>	Moisture	IS 4624	1 g/100g to 20 g/100g
		Fat	IS 12711	0.5 g/100g to 30 g/100g
		total Ash	IS 4628	0.5 g/100g to 15 g/100g
		Protein	IS 7219	0.5 g/100g to 10 g/100g
		Potassium	AOAC 965.30; 20th Edition, 2016	50 mg/kg to 10000 mg/kg
		Iron	IS 14433 / AOAC 985.35; 20th Edition, 2016 / FSSAI: Manual of Methods of Analysis of Foods, Metals, Cl. 3.1, Pg. 10	5 mg/kg to 5000 mg/kg



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		Calcium	AOAC 944.03; 20th Edition, 2016	1 mg/kg to 3500 mg/kg
		Sodium	AOAC 966.16; 20th Edition, 2016	1 mg/kg to 3500 mg/kg
		Acid Insoluble Ash	IS 12711	0.1 g/100g to 20 g/100g
		Carbohydrate	RL/039, Issue No.:02, Issue Date: 13.02.2018/ IS 2234	0.5 g/100g to 75 g/100g
		Calories / Metabolic Energy	RL/040, Issue No.:02, Issue Date: 13.02.2018	5 Kcal/100g to 900 Kcal/100g
		Crude Fiber	IS 10226 (Part1)	0.1 g/100g to 5 g/100g
		Fatty acid profile:		
		total Saturated Fatty acids	AOAC 996.06; 20th Edition, 2016	0.1 g/100g to 20 g/100g
		total Monounsaturated Fatty acids	AOAC 996.06; 20th Edition, 2016	0.1 g/100g to 20 g/100g
		total Polyunsaturated fatty acids	AOAC 996.06; 20th Edition, 2016	0.1 g/100g to 20 g/100g
		Trans fatty acids (Trans- 9 Elaidic Acid)	AOAC 996.06; 20 <sup>th</sup> Edition, 2016	0.1 g/100g to 5 g/100g
11.	<b>Vegetables &amp; vegetable products: Fresh &amp; Dehydrated Vegetables</b>	Moisture	IS 4624	1 g/100g to 20 g/100g
		Fat	IS 12711	0.5 g/100g to 30 g/100g
		total Ash	IS 4628	0.5 g/100g to 15 g/100g
		Protein	IS 7219	0.5 g/100g to 10 g/100g
		Potassium	AOAC 965.30; 20th Edition, 2016	50 mg/kg to 10000 mg/kg
		Iron	IS 14433 / AOAC 985.35; 20th Edition, 2016 / FSSAI: Manual of Methods of Analysis of Foods, Metals, Cl. 3.1, Pg. 10	5 mg/kg to 5000 mg/kg

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		Calcium	AOAC 944.03; 20th Edition, 2016	1 mg/kg to 3500 mg/kg
		Sodium	AOAC 966.16; 20th Edition, 2016	1 mg/kg to 3500 mg/kg
		Acid Insoluble Ash	IS 12711	0.1 g/100g to 20 g/100g
		Carbohydrate	RL/039, Issue No.:02, Issue Date: 13.02.2018/ IS 2234	0.5 g/100g to 75 g/100g
		Calories / Metabolic Energy	RL/040, Issue No.:02, Issue Date: 13.02.2018	5 Kcal/100g to 900 Kcal/100g
		Crude Fiber	IS 10226 (Part1)	0.1 g/100g to 5 g/100g
		Fatty acid profile:		
		total Saturated Fatty acids	AOAC 996.06; 20th Edition, 2016	0.1 g/100g to 20 g/100g
		total Monounsaturated Fatty acids	AOAC 996.06; 20th Edition, 2016	0.1 g/100g to 20 g/100g
		total Polyunsaturated fatty acids	AOAC 996.06; 20th Edition, 2016	0.1 g/100g to 20 g/100g
		Trans fatty acids (Trans- 9 Elaidic Acid)	AOAC 996.06; 20th Edition, 2016	0.1 g/100g to 5 g/100g
<b>12.</b>	<b>Others Food Specified</b>			
<b>a.</b>	<b>Casein</b>	Protein	IS 7219	0.5 g/100g to 95 g/100g
		Moisture	IS 1167	0.1 g/100g to 20 g/100g
		Fat	IS 1167	0.5 g/100g to 25 g/100g
		Acid Insoluble Ash	IS 1167	0.1 g/100g to 10 g/100g
		total Ash	IS 1167	0.5 g/100g to 15 g/100g
		Nitrogen	IS 1167	0.1 g/100g to 14.5 g/100g
		total Acidity In Terms of 0.1n NaOH Per Gram	IS 1167	1 ml to 25 ml
		Free Acidity In Terms of 0.1n NaOH Per 10 g.	IS 1167	0.5 ml to 15 ml
		Acid value	RL/032, Issue No.:02, Issue Date: 13.02.2018	20 to 70

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		Borax Solubility Test	RL/029, Issue No.:02, Issue Date: 13.02.2018	Qualitative test
		Emulsification viscosity	RL/030, Issue No.:02, Issue Date: 13.02.2018	50 g to 1500 g
13.	<b>Tobacco &amp; Tobacco products: Tobacco – Calcatti, Desi Patti, Dakhru, Tobacco Dust, Bidi Patti,</b>	total Ash	IS 5643	0.5 g/100g to 20.0 g/100g
		Nicotine (As total Alkaloid)	AOAC 960.08; 20th Edition, 2016	0.25 g/100g to 7.0 g/100g
		Acid Insoluble Ash	IS 5643	0.5 g/100g to 10.0 g/100g
		Ether Extract	IS 7874	0.5 g/100g to 35 g/100g
		Potassium.	AOAC 965.30; 20th Edition, 2016	50 mg/kg to 20000 mg/kg
		Sodium.	AOAC 966.16; 20th Edition, 2016	50 mg/kg to 25000 mg/kg
		Calcium	AOAC 944.03; 20th Edition, 2016	50 mg/kg to 10000 mg/kg
		Iron	IS 14433 / AOAC 985.35; 20th Edition, 2016 / FSSAI: Manual of Methods of Analysis of Foods, Metals, Cl. 3.1, Pg. 10	5 mg/kg to 3500 mg/kg
III.	<b>RESIDUES IN FOOD PRODUCTS</b>			
1.	<b>Food Products, Bakery and Namkeen, Milk and Milk Products, Fresh and Dehydrated Vegetable products, Grains and Flours, Casein, tobacco, Stimulating foods, Spices and</b>	Arsenic	AOAC 986.15; 20th Edition, 2016	0.5 mg/kg to 100 mg/kg
		Lead	AOAC 999.11; 20th Edition, 2016 / FSSAI: Manual of Methods of Analysis of Foods, Metals, Cl. 3.1, Pg.10	2 mg/kg to 100 mg/kg
		Mercury	FSSAI: Manual of Methods of Analysis of Foods, Metals, Cl. 3.2, Pg. 15	0.5 mg/kg to 100 mg/kg
		Cadmium	AOAC 999.11; 20th Edition, 2016 / FSSAI: Manual of Methods of Analysis of	0.5 mg/kg to 100 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
	Condiments, Oil seeds, Skimmed milk powder and milk powder, Egg Powder.		Foods, Metals, Cl. 3.1, Pg. 10	
		Zinc	AOAC 999.11; 20th Edition, 2016 / FSSAI: Manual of Methods of Analysis of Foods, Metals, Cl. 3.1, Pg. 10	1.0 mg/kg to 1000 mg/kg
		Manganese	AOAC 985.35; 20th Edition, 2016	1.0 mg/kg to 500 mg/kg
		Copper	AOAC 999.11; 20th Edition, 2016 / FSSAI: Manual of Methods of Analysis of Foods, Metals, Cl. 3.1, Pg. 10	5.0 mg/kg to 500 mg/kg
IV.	LUBRICANTS			
1.	Mineral Oil (Industrial Oil), Gear Oil, Cutting Oil For Grinding Machine, Quenching Oil.	Flash Point	IS 1448 Part 69- Cleveland Open Cup Method	150 0C to 350 0C
		Fire Point	IS 1448 Part 69 -Cleveland Open Cup Method	150 °C to 350 °C
		Density at 15°C	IS 1448 Part 32	0.8000 gm/cm <sup>3</sup> to 1.5000 g/cm <sup>3</sup>
		Saponification Value	IS 1448 Part 55 (S -1)	10 to 150