

As an accredited laboratory, this laboratory is entitled to use the following accreditation symbol.



Valid from 10 April 2019  
to 10 July 2019  
Issued on 10 May 2019



ISO/ IEC 17025  
TL 003-01

## Schedule of Accreditation

Accreditation Scheme for Testing Laboratories  
Sri Lanka Accreditation Board for Conformity Assessment  
Accreditation Number: TL 003-01

**Chemical Laboratory**  
**SGS Lanka (Pvt) Limited**  
**No 141/7, Vauxhall Street**  
**Colombo 02**

**Scope of Accreditation:** Performing Chemical Testing of Food and Agricultural Products, Fertilizer, Water, Pesticide Residues, Cosmetics and Soil as per the Test Methods appearing in this schedule.

The laboratory is accredited for the tests appear from page 02 to 21;

SI NO	Product(s) / Material of test	Specific tests performed	Test Method/ Standard against which tests are performed	Range of testing/ Limits of detection
<b>1 Food and Agricultural Products</b>				
1.1	Fish & Fishery Products (Fish, Prawns, Chicken, Sausages, meat balls, fish balls, canned fish, Dry fish, crabs, cuttlefish)	Sodium metabisulphite, as SO <sub>2</sub>	AOAC 990.28: 2012	10 - 2000 mg/kg
		Mercury	LCHE/TM/SOP/007 AOAC 977.15: 2012 AOAC 974.14: 2012	LOQ = 0.1 mg/L
		Cadmium	LCHE/TM/SOP/011 AOAC 999.10: 2012	LOQ = 1.0 mg/L
		Lead		LOQ = 4.0 mg/L
1.2	Fish & Fishery Products (Maldivian fish, Dry fish)	Histamine Content	AOAC 977.13:2012	0.1-100 mg/kg
1.3	Tea (Black tea, Green tea, Flavored tea, Herbal tea)	Moisture	ISO 1573:1980	4 – 10 %
		Water Extract (On dry basis)	ISO 9768:1994	32 – 45 %
		Total Ash (On dry basis)	ISO 1575:1987	4 – 8 %
		Water soluble ash percentage of total ash (On dry basis)	ISO 1576:1988	55 – 65 %
		Water soluble Ash (On dry basis)	ISO 1576:1988	2 – 4 %
		Alkalinity of water soluble ash as KOH or as K <sub>2</sub> O (On dry basis)	ISO 1578:1975	1 – 3 %
		Water insoluble ash (On dry basis)	ISO 1576: 1988	2 – 4 %
		Acid insoluble Ash (On dry basis)	ISO 1577:1987	0.1 – 1 %
		Crude Fiber (On dry basis)	ISO 15598:1999	8 – 16 %
		Caffeine	ISO 10727:2002	2 – 4 %
		Total Polyphenol	ISO 14502-1:2005	11 – 30 %
		Copper	LCHE/TM/SOP/009 (Based on AOAC 999.10:2012)	LOQ=1.0 mg/kg
		Lead		LOQ=4.0 mg/kg
		Cadmium		LOQ=1.0 mg/kg
Iron	LOQ=2.0 mg/kg			
Zinc	LOQ=1.0 mg/kg			
Nickel				

SI NO	Product(s) / Material of test	Specific tests performed	Test Method/ Standard against which tests are performed	Range of testing/ Limits of detection
1.4	Tea (Rare earth elements)	Scandium	GB 5009.94-2012	MQL = 0.2µg/L
		Yttrium		
		Lanthanum		
		Cerium		
		Praseodymium		
		Neodymium		
		Samarium		
		Europium		
		Gadolinium		
		Terbium		
		Dysprosium		
		Holmium		
		Erbium		
		Thulium		
Ytterbium				
Lutetium				
1.5	Spices Black & White Pepper, Cloves, Nutmeg, Mace Cardamom. Turmeric powder	Moisture content	ASTA Method 2.0: 2011	5 – 18 %
		Volatile oil content (On dry basis)	ASTA Method 5.0: 2010	1 - 20 ml/100g
		Total Ash (On dry basis)	ISO 928:1997 (SLS 186-3:2008)	1 – 9 %
		Acid Insoluble Ash	ISO 930:1997 (SLS 186-4:2008)	0.1 - 1%
		Crude fiber (On dry basis)	ASTA Method 7.0: 1997	1 – 40 %
1.6	Cinnamon	Moisture content	ASTA Method 2.0: 2011	5 – 18 %
		Volatile oil content (On dry basis)	ASTA Method 16.0: 2010	0 – 5 ml/100g
		Total Ash (On dry basis)	ISO 928:1997 (SLS 186-3: 2008)	1 - 9 %
		Acid Insoluble Ash (On dry basis)	ISO 930:1997 (SLS 186-4:2008)	0.1 – 1 %
		Crude fiber (On dry basis)	ASTA Method 7.0: 1997	1 – 50 %
		Sulphur dioxide	AOAC 990:28: 2012	10 - 500 mg/kg
		Coumarin Content	LCHE/SOP/072	1 - 30,000 ppm

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1.7	Black & white Pepper	Piperine content	ASTA Method 12.1: 1997	5 – 12 %
1.8	Desiccated coconut	Moisture content	SLS 98:Appendix C: 1988	1 – 3.5 %
		Oil content	SLS 98: Appendix D: 1988	30 – 70 %
		Acidity, as lauric acid	SLS 98: Appendix E: 1988	0.05 – 1 %
1.9	Fruit juice & concentrates	Sulphur dioxide	AOAC 990.2.8 Monier Williams method	10 mg/kg
		Titratable acidity	SLS 214: 2010, Appendix C	
		Benzoic acid content	SLS 214:2010 Appendix-E	
		Sorbic acid content		
1.10	Cereals, Corn Flakes, Full Cream Milk Powder, Skimmed Milk Powder	Lead	LCHE/TM/SOP/012, Rev 00:2012	LOQ = 4.0 mg/L
		Cadmium		LOQ = 1.0 mg/L
		Mercury		
		Aluminum		
		Arsenic		
		Copper	LCHE/TM/SOP/008, Rev 00:2011	LOQ=3.0 mg/L
		Manganese		LOQ=5.0 mg/L
		Magnesium		LOQ=1.0 mg/L
		Zinc		LOQ=5.0 mg/L
		Calcium		
		Moisture content	SLS 735-3:1987	0.01 – 5.0 %
		Milk fat content	SLS 735-1:Section 2: Annex B: 2009	0.01 –5.00 %
		Milk protein in milk solids non-fat	SLS 731:Appendix E: 2008	30 – 50 %
		Titratable acidity, as lactic acid	SLS 735-2:1987	0.01 - 2.0 %

SI NO	Product(s) / Material of test	Specific tests performed	Test Method/ Standard against which tests are performed	Range of testing/ Limits of detection
1.11	Edible fats & Oils (Coconut Oil, Palm Oil, Palm Olein, Palm Sterain, Palm Kernal Oil, Sunflower Seed Oil, Fatty Acid Methyl Ester)	Butyric acid	ISO 12966-1:2014 (E) ISO 12966-2:2011 (E)	LOD 0.01 g/100g
		Caproic acid		
		Caprylic acid		
		Capric acid		
		Undecanoic acid		
		Lauric acid		
		Tridecanoic acid		
		Myristic acid		
		Myristoleic acid		
		Pentadecanoic acid		
		<i>cis</i> -10-pentadecanoic acid		
		Palmitic acid		
		Palmitoleic acid		
		Heptadecanoic acid		
		<i>cis</i> -10-heptadecanoic acid		
		Stearic acid		
		Elaidic acid		
		Oleic acid		
		Linolelaidic acid		
		Linoleic acid		
		Arachidic acid		
		<i>g</i> -Linolenic acid		
		<i>cis</i> -11-eicosenoic acid		
Linolenic acid				
Heneicosanoic acid				
<i>cis</i> -11-14-eicosatrienoic acid				
Behenic acid				

SI NO	Product(s) / Material of test	Specific tests performed	Test Method/ Standard against which tests are performed	Range of testing/ Limits of detection
1.11	Edible fats & Oils (Coconut Oil, Palm Oil, Palm Olein, Palm Sterain, Palm Kernal Oil, Sunflower Seed Oil, Fatty Acid Methyl Ester)	Methyl <i>cis</i> -8,11,14-eicosatrienoate	ISO 12966-1:2014 (E) ISO 12966-2:2011 (E)	LOD 0.01 g/100g
		Erucic acid		
		<i>cis</i> -11-14-17-eicosatrienoic acid		
		Arachidonic acid		
		Tricosanoic acid		
		<i>cis</i> -13,16-docosadienoic acid		
		<i>cis</i> -5,8,11,17-eicosapetaenoic acid		
		Nervonic acid		
		<i>cis</i> -4,7,10,13,16,19-docosahexaenoic acid		
		Lignoceric acid		
		Saturated fatty acids		
		Mono unsaturated fatty acids		
		Poly unsaturated fatty acids		
		Trans fatty acids		
1.12	Edible fats & oils (Coconut oil, Palm oil, Palm olein, Palm sterain, Palm kernel oil, Sunflower seed oil)	Lovibond colour: 133.4 mm (5 ¼ inch)	SLS 313-1:Section 4: 2009 (ISO 15305: 1998)	0.1 - 70 R, 0.1 - 70 Y, 0.1 - 40 B, 0.1 - 3.0 neutral (Lovibond units)
		Relative Density	SLS 313-1:Section 2: 2009	0.800 – 0.950 (t°C/t0°C in air)
		Insoluble impurities content	SLS 313-3:Section 4: 2009 (ISO 663: 2017)	0.01 – 1.00 %
		Moisture and volatile matter content	SLS 313-3:Section 5: 2009 (ISO 662:2016)	0.01 – 1.00 %
		Free fatty acids / Acidity / Acid value	SLS 313-2:Section 6:2009 (ISO 660: 2009)	0.01 – 6.00 %
		Iodine Value	SLS 313-2:Section 2: 2014 (ISO 3961: 2018)	5 – 160

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1.12	Edible fats & oils (Coconut oil, Palm oil, Palm olein, Palm sterain, Palm kernel oil, Sunflower seed oil)	Saponification value	SLS 313-2:Section 1: 2014 (ISO 3657:2013)	160 - 270
		Unsaponifiable matter content	SLS 313-4:Section 3: 2010(ISO 3596: 2000)	0.50 – 3 %
		Peroxide value	SLS 313-3:Section 7: 2009 ISO 3960: 2017	0 – 10 meq/kg
		Slip melting point	SLS 313-1:Section 7: Annex A: 2009 (ISO 6321:2002)	10 – 100.0 °C
1.13	Dairy fat spread	Fat content	SLS 735-1: Section 8: 2011	10 - 80 %
		Salt content	SLS 735-11: 2011	0.5 – 3%
		Free Fatty acid as oleic acid	SLS 313-2: Section 6: 2009	0.05 - 1.0 %
1.14	Sugar confectionary (Chewing gum, Bubble gum, Toffee, Lozenges, Hard boiled sugar, Gelatin based products, Pectin based Products)	Moisture	SLS 586: Clause 3:1982 SLS 586: 1982	0.1 - 25%
		Sulphated Ash	SLS 586: Clause 4:1982	0.01 - 11.5%
		Acid Insoluble Ash	SLS 586: Clause 5:1982	0.01 - 2.0%
		Reducing Sugar	SLS 586: Clause 6:1982	1 - 50%
		Sucrose	SLS 586: Clause 7:1982	1 - 100%
		Fat	SLS 586: Clause 8:1982	0.1 - 10.0%
1.15	Edible salt (Granular form)	Moisture	SLS 79: 2014	0.1-12.0%
		Sodium chloride as Nacl		90-100%
		Iodine content		10-50 mg/kg
		Matter insoluble in water on dry basis % by mass		0.01 - 2.0%
1.16	Food grade salt (Powdered form)	Moisture	SLS 80: 2014	0.1 - 10.0%
		Matter insoluble in water		0.01 – 2.0%
		Sodium Chloride as NaCl		90-100%
		Iodine content		10-50 mg/kg

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1.17	White sugar	Polarization	SLS 191:Appendix B:2017	0-100%
		Loss on drying	SLS 191:Appendix D:2017	0.01 – 5.0 %
		Colour	SLS 191:Appendix F:2017	10 – 500 ICUMSA units
1.18	Soya Sauce	pH	SLS 1035: Appendix D: 1995	2 - 8
		Salt as Sodium chloride	SLS 1035: Appendix E: 1995	1 – 20 %
1.19	Biscuit	Moisture	SLS 1313:2007 & SLS 251: Appendix B: 2010	0.5 – 10 %
		Acid insoluble ash	SLS 251: 2010, Appendix C	0.05 – 0.5 %
		Acidity	SLS 251: 2010, Appendix D	0.05 – 2.0 %
<b>2 Fertilizer</b>				
2.1	Sulphate of Ammonia	Moisture	SLS 645: Part 2: Method 2: 1984 SLS 620:2014	0.5 - 1%
		Ammoniacal Nitrogen, as N	SLS 645: Part 1: Section B: 2009 SLS 620:2014	20.3 – 20.8%
		Free Acidity, as H <sub>2</sub> SO <sub>4</sub>	SLS 620: 2014, Appendix C	0.01 – 0.03%
			SLS 620:2014	
		Sulphur	AOAC 980.02 SLS 620:2014	22.7 - 24.5 %
		Arsenic as As	AOAC 2006.03:2012 SLS 620:2014	0.04 – 100 mg/kg
		Chromium as Cr		1 – 100 mg/kg
		Lead as Pb		0.06 – 100 mg/kg
		Mercury as Hg		0.1 – 10 mg/kg
		Cadmium as Cd		0.03 – 100 mg/kg
2.2	Di-ammonium Phosphate	Moisture	SLS 645: Part 2: Method 2: 1984	0.01 - 1.6%
		Ammonical Nitrogen, as N	SLS 645: Part 1: Section B: 2009	10 - 20%
		Total phosphate, as P <sub>2</sub> O <sub>5</sub>	SLS 645: Part 5: 1985	45 - 48%
		Water soluble phosphate, as P <sub>2</sub> O <sub>5</sub>		35.0 - 45.0%



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2.3	Single Super Phosphate (Granular and Powder form)	Moisture	SLS 645: Part 2: Method 1: 1984	0.5 - 5.0%
		Total phosphate as P <sub>2</sub> O <sub>5</sub>	SLS 645: Part 5: 1985	16 - 18%
		Water soluble phosphate, as P <sub>2</sub> O <sub>5</sub>	SLS 645: Part 5: 1985	12.0 – 16.0%
		Free phosphoric acid, as P <sub>2</sub> O <sub>5</sub>	SLS 1318: Appendix B:2007	1.0 – 5.0%
		Cadmium (mg/kg)	AOAC 2006.03: 2012	0.1 - 1 %
2.4	Urea (Prilled and Granular) SLS 618:2014	Moisture	SLS 645: Part 2: Method 2: 1984	0.2 - 1.5%
		Total Nitrogen, as N (on drybasis)	SLS 645: Part 1 :Section C:2009	45.0 – 46.6%
		Biuret	SLS 645: Part 3: Method 2: 2009	0.7 - 1%
		Arsenic as As	AOAC 2006.03:2012 SLS 618:2014	0.04 – 100 mg/kg
		Chromium as Cr		1 – 100 mg/kg
		Lead as Pb		0.06 – 100 mg/kg
		Mercury as Hg		0.1 – 10 mg/kg
		Cadmium as Cd		0.03 – 100 mg/kg
2.5	Potassium chloride MOP	Moisture	SLS 645: Part 2: Method 1: 1984 SLS 644:2014	0.5 - 5.0%
		Sodium, as NaCl (on dry basis)	SLS 645: Part 7: Section 1: 1994 SLS 644:2014	1 – 3.5%
		Water soluble potassium content as K <sub>2</sub> O	AOAC 983.02 SLS 644:2014	59.5 - 63.5%
		Magnesium as MgCl <sub>2</sub>	SLS 644:2014 AOAC 965.09	0.1 - 1 %
		Arsenic as As	AOAC 2006.03:2012 SLS 644:2014	0.04 – 100 mg/kg
		Chromium as Cr		1 – 100 mg/kg
		Lead as Pb		0.06 – 100 mg/kg
		Mercury as Hg		0.1 – 10 mg/kg
		Cadmium as Cd		0.03 – 100 mg/kg

SI NO	Product(s) / Material of test	Specific tests performed	Test Method/ Standard against which tests are performed	Range of testing/ Limits of detection
2.6	TSP	Moisture	SLS 645: Part 2: Method 1: 1984 SLS 812:2014	0.5 - 5.0%
		Total Phosphate, as P <sub>2</sub> O <sub>5</sub>	SLS 645: Part 5: 1985 SLS 644:2014	45.5 – 47.5%
		Water soluble phosphate, as P <sub>2</sub> O <sub>5</sub>	SLS 645: Part 5: 1985 SLS 644:2014	35.0 - 40.0%
		Free phosphoric acid, as P <sub>2</sub> O <sub>5</sub>	SLS 644:2014 Appendix C	1.0 – 5.0 %
		Arsenic as As	AOAC 2006.03:2012 SLS 644:2014	0.04 – 100 mg/kg
		Chromium as Cr		1 – 100 mg/kg
		Lead as Pb		0.06 – 100 mg/kg
		Mercury as Hg		0.1 – 10 mg/kg
		Cadmium		0.03 – 100 mg/kg
		2.7	Mixed Fertilizer	Moisture
Total nitrogen, as N	SLS 645: Part 1: Section C: 2009			5.0 – 40 %
Total Phosphorous, as P <sub>2</sub> O <sub>5</sub>	SLS 645: Part 5: 1985			5.0 - 50.0 %
Magnesium content as MgO	SLS 645:PART 6 1990			23.2-29 %
Water solubility	SLS 1104:2014 appendix D			19.5-40 %
Arsenic as As	AOAC 2006.03:2012			0.04 – 100 mg/kg
Chromium as Cr				1 – 100 mg/kg
Lead as Pb				0.06 – 100 mg/kg
Mercury as Hg				0.1 – 10 mg/kg
Cadmium as Cd				0.03 – 100 mg/kg
<b>3 Water</b>				
3.1	Drinking Water, Processing Water, Potable Water, Raw Water.	pH	APHA 4500-H <sup>+</sup> B: 2017 (23 <sup>rd</sup> Edition)	1.0 – 14.0
		Chloride, as Cl	APHA 4500-Cl <sup>-</sup> B: 2017 (23 <sup>rd</sup> Edition)	1- 500 mg/L
		Hardness, as CaCO <sub>3</sub>	APHA 2340 C: 2017(23 <sup>rd</sup> Edition)	2 - 1000 mg/L
		Nitrate, as N	APHA 4500-NO <sub>3</sub> <sup>-</sup> B: 2017(23 <sup>rd</sup> Edition)	0.1- 50 mg/L
		Free Ammonia, as N	APHA 4500-NH <sub>3</sub> D: 2017(23 <sup>rd</sup> Edition)	0.04 – 0.65 mg/L

SI NO	Product(s) / Material of test	Specific tests performed	Test Method/ Standard against which tests are performed	Range of testing/ Limits of detection
3.1	Drinking Water, Processing Water, Potable Water, Raw Water.	Fluoride, as F	APHA 4500-F- C: 2017(23 <sup>rd</sup> Edition)	0.1 – 5.0 mg/L
		Alkalinity, as CaCO <sub>3</sub>	APHA 2320 B: 2017(23 <sup>rd</sup> Edition)	2–1000 mg/L
		Nitrite, as N	APHA 4500-NO <sub>2</sub> <sup>-</sup> B: 2017 (23 <sup>rd</sup> Edition)	0.01 – 10.0 mg/L
		Dissolve Oxygen	APHA 4500-O-H 2017 (23 <sup>rd</sup> Edition)	0.1 – 20.0 mg/L
		Residual chlorine, as Cl <sub>2</sub>	APHA 4500-Cl G: 2017(23 <sup>rd</sup> Edition)	0.07 – 4.0 mg/L
		Free CO <sub>2</sub>	APHA 4500-CO <sub>2</sub> B: 2017(23 <sup>rd</sup> Edition)	0.1 – 2000 mg/L
		Oil & Grease	APHA 5520 B: 2017 (23 <sup>rd</sup> Edition)	1 – 100 mg/L
		Total solids/ Dry Residues	APHA 2540 B: 2017(23 <sup>rd</sup> Edition)	3 – 2000 mg/L
		Total Suspended Solids	APHA 2540 D: 2017(23 <sup>rd</sup> Edition)	2 – 500 mg/L
		Total Dissolved Solids	APHA 2540 C: 2017(23 <sup>rd</sup> Edition)	3 – 2000 mg/L
		Iron, as Fe	APHA 3500-Fe B: 2017(23 <sup>rd</sup> Edition)	0.1 – 50.0 mg/L
		Sodium, as Na	APHA 3120 B: 2017(23 <sup>rd</sup> Edition)	0.05 – 200 mg/L
		Potassium, as K		0.05 - 100 mg/L
3.2	Drinking Water, Processing Water, Potable Water, RO Water, Desalinated Water	pH	APHA 4500-H <sup>+</sup> B: 2017 (23 <sup>rd</sup> Edition)	1.0 – 14.0
		Total Phosphorous, as P <sub>2</sub> O <sub>5</sub>	APHA 4500-P D: 2017 (23 <sup>rd</sup> Edition)	0.16 – 229.14 mg/L
		Total Phosphorous, as PO <sub>4</sub> <sup>3-</sup>	APHA 4500-P D: 2017 (23 <sup>rd</sup> Edition)	0.21 – 306.62 mg/L
		Alkalinity, as CaCO <sub>3</sub>	APHA 2320 B: 2017 (23 <sup>rd</sup> Edition)	2–1000 mg/L
		Nitrite, as N	APHA 4500-NO <sub>2</sub> <sup>-</sup> B: 2017(23 <sup>rd</sup> Edition)	0.01 – 10.0 mg/L
		Hardness, as CaCO <sub>3</sub>	APHA 2340 C: 2017 (23 <sup>rd</sup> Edition)	2 - 1000 mg/L
		SI NO	Product(s) / Material of test	Specific tests

		<b>performed</b>	<b>against which tests are performed</b>	<b>of detection</b>
3.2	Drinking Water, Processing Water, Potable Water, RO Water, Desalinated Water	Nitrate, as N	APHA 4500-NO <sub>3</sub> <sup>-</sup> B: 2017(23 <sup>rd</sup> Edition)	0.1 – 50.0 mg/L
		Nitrate, as NO <sub>3</sub> <sup>-</sup>	APHA 4500-NO <sub>3</sub> <sup>-</sup> B: 2017 (23 <sup>rd</sup> Edition)	0.44 – 221.34 mg/L
		Free Ammonia, as N	APHA 4500-NH <sub>3</sub> D: 2017 (23 <sup>rd</sup> Edition)	0.04 – 0.65 mg/L
		Free Ammonia, as NH <sub>3</sub>	APHA 4500-NH <sub>3</sub> D: 2017(23 <sup>rd</sup> Edition)	0.049 – 0.79 mg/L
		Free Ammonia, as NH <sub>4</sub> <sup>+</sup>	APHA 4500-NH <sub>3</sub> D: 2017(23 <sup>rd</sup> Edition)	0.052 -0.837 mg/L
		Fluoride, as F	APHA 4500-F <sup>-</sup> C: 2017 (23 <sup>rd</sup> Edition)	0.10-5.00 mg/L
		Nitrite as NO <sub>2</sub> <sup>-</sup>	APHA 4500-NO <sub>2</sub> <sup>-</sup> B:2017 (23 <sup>rd</sup> Edition)	0.03 – 32.85 mg/L
		Dissolved Oxygen	APHA 4500-O-H 2017 (23 <sup>rd</sup> Edition)	0.10 – 20.0 mg/L
3.3	RO Water, Desalinated Water	Ammonical Nitrogen as N	APHA 4500- NH <sub>3</sub> C & D: 2017 (23 <sup>rd</sup> Edition)	5 - 200 mg/L
		Residual Chlorine as Cl <sub>2</sub>	APHA 4500-Cl G: 2017 (23 <sup>rd</sup> Edition)	0.07 – 4.0 mg/L
		Free CO <sub>2</sub>	APHA 4500-CO <sub>2</sub> B: 2017 (23 <sup>rd</sup> Edition)	0.05 – 2000 mg/L
		Oil & Grease	APHA 5520 B: 2017 (23 <sup>rd</sup> Edition)	1 – 100 mg/L
		Total solids/Dry residues	APHA 2540 B: 2017 (23 <sup>rd</sup> Edition)	2 – 2000 mg/L
		Total suspended solids	APHA 2540 D: 2017 (23 <sup>rd</sup> Edition)	2 – 500 mg/L
		Total dissolved solids	APHA 2540 C: 2017 (23 <sup>rd</sup> Edition)	3 – 2000 mg/L
		Iron as Fe	APHA 3500-Fe B: 2017 (23 <sup>rd</sup> Edition)	0.1 – 50 mg/L
3.4	Drinking Water, Processing Water, Potable Water, Raw Water. RO Water, Desalinated Water	Chemical Oxygen Demand [COD]	APHA 5220 D: 2017 (23 <sup>rd</sup> Edition)	6 - 100 mg/L
		Calcium, as Ca	APHA 3500-Ca B: 2017 (23 <sup>rd</sup> Edition)	4 - 1000 mg/L
			APHA 3120 B: 2017 (23 <sup>rd</sup> Edition)	0.05 - 200mg/L
		Magnesium, as Mg	APHA 3120 B: 2017 (23 <sup>rd</sup> Edition)	10 – 1000 mg/L
		Boron as B		0.05 – 200 mg/L
				0.01 – 50 mg/L
<b>SI NO</b>	<b>Product(s) / Material of test</b>	<b>Specific tests performed</b>	<b>Test Method/ Standard against which tests are performed</b>	<b>Range of testing/ Limits of detection</b>

3.4	Drinking Water, Processing Water, Potable Water, Raw Water. RO Water, Desalinated Water	Cobalt, as Co		0.01 – 10 mg/L
		Beryllium, as Be		
		Antimony, as Sb		0.05– 10 mg/L
		Manganese, as Mn		0.01– 10 mg/L
		Zinc, as Zn		
		Silver, as Ag		0.05- 10 mg/L
		Arsenic, as As		0.01- 10 mg/L
		Nickel, as Ni	APHA 3120 B: 2017 (23 <sup>rd</sup> Edition)	0.01- 10 mg/L
		Barium, as B		0.05- 10 mg/L
		Lead, as Pb		0.01- 100 mg/L
		Copper, as Cu		0.01- 10 mg/L
		Aluminium, as Al		0.01- 10 mg/L
		Vanadium, as V		0.01- 05 mg/L
		Cadmium, as Cd		0.003- 10 mg/L
		Chromium, as Cr		0.01- 10 mg/L
		Selenium, as Se		
		Iron, as Fe		
		Tin, as Sn	APHA 3113 B: 2017 (23 <sup>rd</sup> Edition)	0.05 - 5.0 mg/L
Turbidity	APHA 2130 B: 2017 (23 <sup>rd</sup> Edition)	0.5-800 NTU		
3.5	Waste Water	pH	APHA 4500-H <sup>+</sup> B: 2017 (23 <sup>rd</sup> Edition)	1-14
		Chemical Oxygen Demand [COD]	APHA 5220 D: 2017 (23 <sup>rd</sup> Edition)	6 – 2000 mg/L
		Turbidity	APHA 2130 B: 2017 (23 <sup>rd</sup> Edition)	0.5 - 800 NTU
		Conductivity	APHA 2510 B: 2017 (23 <sup>rd</sup> Edition)	0.6 – 2000 µS/cm
		Oil & Grease	APHA 5520 B: 2017 (23 <sup>rd</sup> Edition)	1 - 100 mg/L
		Colour	ISO 7887:Method B: 2011	0.1 - 99.9
		Silicate	APHA 4500-SiO <sub>2</sub> C: 2012 (22 <sup>nd</sup> Edition)	0.5 - 100 mg/L
		Total Suspended Solids	APHA 2540 D: 2017 (23 <sup>rd</sup> Edition)	2 – 500 mg/L

SI NO	Product(s) / Material of test	Specific tests performed	Test Method/ Standard against which tests are performed	Range of testing/ Limits of detection	
3.5	Waste Water	Total Dissolved Solids	APHA 2540 C: 2017 (23 <sup>rd</sup> Edition)	3 – 2000 mg/L	
		Total Phosphorous, as P <sub>2</sub> O <sub>5</sub>	APHA 4500-P D: 2017 (23 <sup>rd</sup> Edition)	0.16 – 229.14 mg/L	
		Total Phosphorous, as PO <sub>4</sub> <sup>3-</sup>		0.21 – 306.62 mg/L	
		Total Phosphorous, as P		0.07 - 100 mg/L	
		Dissolved Phosphorous, as P			
		Dissolved Phosphorous, as PO <sub>4</sub> <sup>3-</sup>			0.21 – 306.62 mg/L
		Dissolved Phosphorous, as P <sub>2</sub> O <sub>5</sub>			0.16 – 229.14 mg/L
		Ammonical nitrogen, as N		APHA 4500-NH3 C : 2017 (23 <sup>rd</sup> Edition)	5 – 200 mg/L
		Ammonical nitrogen, as NH <sub>3</sub>	6.08-243.18		
		Dissolve Oxygen	APHA 4500-O-H 2017 (23 <sup>rd</sup> Edition)	0.1 – 20.0 mg/L	

SI NO	Product(s) / Material of test	Specific tests performed	Test Method/ Standard against which tests are performed	Range of testing/ Limits of detection
<b>4 Pesticide Residues</b>				
4.1	Tea	Bifenthrin	LCHE/TM/SOP/001;Rev09 (AOAC 2007.01 2012)	LOD 0.01 mg/kg
		Chlorothalonil		
		Chlorpyrifos		
		Hexaconazole		
		Propiconazole		
		Dicofol		
		Bromopropylate		
		Chlorfluzuron		
		Cypermethrin		
		Flusilazole		
		Ethion		
		Fenpropathrin		
		Fenthion		
		Malathion		
		Methidathion		
		Parathion- methyl		
		Tebuconazole		
		Tetradifon		
		Propagite		
		Permethrin		
		Endosulfan		
		Etaxazole		
		Paraquate	LCHE/TM/SOP/ /065;Rev02	
Thiamethoxam	LCHE/TM/SOP/064;Rev04			
Dichlorvos				
Diurone	LCHE/TM/SOP/001; Rev09 AOAC 2017.01.2012			
Endrin-ketone				
alpha-HCH				
		beta-HCH		

SI NO	Product(s) / Material of test	Specific tests performed	Test Method/Standard against which tests are performed	Range of testing/ Limits of detection
4.1	Tea	gamma-HCH	LCHE/TM/SOP/001; Rev09 AOAC 2017.01.2012	LOD 0.01 mg/kg
		delta-HCH		
		Heptachlor		
		Heptachlor-epoxide		
		Methoxychlor		
		Anthraquinone		
		Diazinone		
		Oxyfluorefen		
		4,4-DDD		
		4,4-DDE		
		4,4-DDT		
		Aldrin		
		Dieldrin		
		alpha- Endosufan		
		beta- Endosulfan		
		Endosulfan sulfate		
		Endrin		
		Endrin aldehyde		
		Acephate	LCHE/TM/SOP/064; Rev 04	LOD 0.01 mg/kg
		Acetamiprid		
Imidachlorprid				
MCPA	LCHE/TM/SOP/076; Rev 00			
2, 4-D				
4.2	Fruits & Vegetables	Bifenthrin	LCHE/TM/SOP/001;Rev 09 (Based on AOAC 2007.01:2012)	LOD 0.01 mg/kg
		Chlorothalonil		
		Chlorpyrifos		
		Hexaconazole		
		Propiconazole		
		Dicofol		
		Bromopropylate		



SI NO	Product(s) / Material of test	Specific tests performed	Test Method/Standard against which tests are performed	Range of testing/ Limits of detection
4.2	Fruits & Vegetables	Chlorfluzuron	LCHE/TM/SOP/001;Rev 09 (Based on AOAC 2007.01:2012)	LOD 0.01 mg/kg
		Cypermethrin		
		Flusilazole		
		Etaxazole		
		Ethion		
		Fenpropathrin		
		Fenthion		
		Malathion		
		Methidathion		
		Parathion- methyl		
		Tebuconazole		
		Tetradifon		
		Propagite		
		Endrin-ketone		
		alpha-HCH		
		beta-HCH		
		gamma-HCH		
		delta-HCH		
		Heptachlor		
		Heptachlor-epoxide		
Methoxychlor				
Anthraquinone				
Diazinone				
Permethrin				

SI NO	Product(s) / Material of test	Specific tests performed	Test Method/Standard against which tests are performed	Range of testing/ Limits of detection
4.2	Fruits & Vegetables	Dichlorvos	LCHE/TM/SOP/001;Rev 09 (Based on AOAC 2007.01:2012)	LOD 0.01 mg/kg
		Oxyfluorefen		
		Aldrin		
		4,4-DDE		
		4,4-DDD		
		4,4-DDT		
		Dieldrin		
		alpha-Endosulfan		
		beta-Endosulfan		
		Endosulfan-sulfate		
		Endrin		
		Endrin- aldehyde		
		Acephate		
		Acetamiprid		
		Imidachlorprid		
		Diuron		
		Thiamethoxam	LCHE/TM/SOP/065 Rev 002	
Paraquate				
MCPA	LCHE/TM/SOP/076; Rev 00			
2,4-D	LCHE/TM/SOP/076; Rev 00			
4.3	RO Water, Desalinated water	Aldrin	APHA 6630:2017: Part C	LOD 0.01 µg/L
		4,4-DDE		
		4,4-DDD		
		4,4-DDT		
		Dieldrin		
		alpha-Endosulfan		
		beta-Endosulfan		
		Endosulfan-sulfate		
		Endrin		

SI NO	Product(s) / Material of test	Specific tests performed	Test Method/Standard against which tests are performed	Range of testing/ Limits of detection
4.3	RO Water, Desalinated water	Endrin- aldehyde		
		Endrin-ketone		
		alpha-HCH		
		beta-HCH		
		gamma-HCH		
		delta-HCH	APHA 6630:2017: Part C	LOD 0.01 mg/L
		Heptachlor		
		Heptachlor-epoxide		
		Methoxychlor		
<b>5 Cosmetics</b>				
5.1	Laundry soap powders, flakes & chips	Total fatty matter	ISO 685:1975	10 – 90 %
		Free caustic alkali	ISO 456:1973	0.01 – 5 %
		Content of ethanol-insoluble matter	ISO 673:1981	0– 4.0 %
		Chloride content, as NaCl	ISO 457:1983	0.1 – 3.0 %
		Moisture & volatile matter content	ISO 672:1978	0.5 – 7 %
		Unsaponified and unsaponifiable matter	ISO 1067:1974	0.5 – 4 %
		pH at 27±2°C	SLS 38:Appendix B: 2009	3.0-13,0
5.2	Baby soap	Total fatty matter	ISO 685:1975	10 – 90 %
		Freedom from rosin	SLS 547:Appendix B: 2009	Not Applicable (Qualitative test)
		Content of ethanol-insoluble matter	ISO 673:1981	0.1 – 4.0 %
		Free caustic alkali as NaOH	ISO 456:1973	0.02 – 2 %
		Total free alkali as NaOH	ISO 684:1974	0.02 – 5 %
		Chloride content, as NaCl	ISO 457:1983	0.5 – 2 %
5.3	Liquid Toilet Soap	Total fatty matter	ISO 685:1975	10 – 80 %
		pH at 27 ± 2°C	SLS 1142:Appendix B: 2009	3 – 13.0
		Content of ethanol-insoluble matter	ISO 673:1981	0.1 – 4 %
		Total free alkali as NaOH	ISO 684:1974	0.02 – 5 %

SI NO	Product(s) / Material of test	Specific tests performed	Test Method/Standard against which tests are performed	Range of testing/ Limits of detection
5.4	Toilet soap	Total fatty matter	SLS34:Appendix C: 2009	10 – 90 %
		Rosin acids content	SLS34:Appendix B: Method 2: 2009	0.5 – 5 %
		Content of ethanol-insoluble matter	ISO 673:1981	0.5 – 4 %
		Free caustic alkali as NaOH	ISO 456:1973	0.02 – 5 %
		Total free alkali as NaOH	ISO 684:1974	0.02 – 5 %
		Chloride content, as NaCl	ISO 457:1983	0.5 – 3 %
5.5	Skincream & lotions	pH at 27 ± 2 °C	SLS 611:Appendix C.3: 1983	3.0-13.0
		Non-volatile matter at 105 °C	SLS 743:Appendix B: 2014	5 – 50 %
		Water Content	SLS 611:Appendix C.5: 1983	5 – 95 %
5.6	Skin creams & lotions for babies	pH at 27±2°C	SLS 611:Appendix C.3: 1983	1.0 – 14.0
		Non-volatile matter at 105°C	SLS 742:Appendix B: 2014	5 – 50 %
		Water content	SLS 611:Appendix C.5: 1983	5 – 95 %
5.7	After-shave Lotion	Ethanol Content	SLS 534:Appendix A: 1981	10 – 95 %
5.8	Cologne			
5.9	Baby Cologne			
5.10	Skin Powder for Infants	Matter insoluble in boiling Water	SLS 187:Appendix C: 2013	10 – 99 %
		Fineness a) Residue on 75-µm sieve, percent by mass, max. b) Residue on 150-µm sieve, percent by mass, max.	SLS 187:Appendix D: 2013	0.01 – 3%
		Moisture & volatile matter	SLS 187:Appendix E: 2013	0.5 – 5 %
		pH of aqueous suspension	SLS 187:Appendix F: 2013	3.0-13.0
5.11	Skin Powder	Matter insoluble in boiling Water	SLS 389:Appendix C: 2014	10 – 99 %
		Fineness a) Residue on 75-µm sieve, percent by mass, max. b) Residue on 150-µm sieve, percent by mass, max.	SLS 389:Appendix D 2014	0.05 – 3%
		Moisture & volatile matter	SLS 389:Appendix E: 2014	0.5 – 5 %
		pH of aqueous suspension	SLS 389:Appendix F: 2014	3.0-13.0

SI NO	Product(s) / Material of test	Specific tests performed	Test Method/Standard against which tests are performed	Range of testing/ Limits of detection
5.12	Sanitary Towels	Absorbency	SLS 111:Appendix B: 2009	Not Applicable (Qualitative test)
		pH value	SLS 86: 2006	1.0 – 14.0
		Ash content	SLS 111:Appendix C: 2009	0.1 – 10 %
		Water soluble extract	SLS 111:Appendix D: 2009	0.1 – 2 %
		Moisture Content	SLS 111:Appendix F: 2009	1– 20 %
5.13	Hair shampoo	Active synthetic anionic ingredient content	SLS 1342:Appendix B: 2008	1 – 20 %
		pH at 27± 2°C	SLS 1342:Appendix C: 2008	1.0 - 14.0
		Inorganic salts	SLS 1342:Appendix D: 2008	1 – 10 %
		Lather volume	SLS 1342:Appendix E: 2008	10 – 200 ml
5.14	Hair shampoo for babies	Active synthetic anionic ingredient content	SLS 1342:Appendix B: 2008	1 – 20 %
		pH at 27± 2°C	SLS 1342:Appendix C: 2008	1.0 - 14.0
		Inorganic salts	SLS 1342:Appendix D: 2008	1 – 10 %
		Lather volume	SLS 1342:Appendix E: 2008	10 – 200 ml
<b>6 Soil</b>				
6.1	Soil	Total Nitrogen	ISO 11261:1995	1 – 50 mg/kg
		Extractable P	ISO 11263:1994	2 – 100 mg/kg
		Organic C	ISO 14235:1998	0.5 – 200 mg/kg
		K	ISO 13536:1995	2 – 100 mg/kg
		Mg		
		Na		
		pH	ISO 10390:2005	3-13
		Electrical conductivity	ISO 11265:1994	0.5 – 200 mg/kg
		Cadmium	EPA 3051 A:2007	0.05 – 100 mg/kg
		Chromium		2 – 100 mg/kg
		Copper		1 – 100 mg/kg
		Lead		2 – 100 mg/kg
		Molebdenum		1 – 100 mg/kg
		Nickel		2 – 100 mg/kg
		Vanadium		
Zinc				