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



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) Ltd  
No,146/6,2<sup>nd</sup> Floor  
Vauxhall Street  
Colombo 02.

**Scope of Accreditation:** Performng Chemical Testing of Cosmetics ,Food & Agricultural Products, Fertilizer, Water & Pesticides Residues as per the Test Methods appearing in this schedule.

The laboratory is accredited for the following tests. ( Please see the page 02 onwards for details)

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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</b>	<b>Cosmetics</b>			
1.1	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	1.0 – 14.0
1.2	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	0.1 – 30 %
		Total free alkali as NaOH	ISO 684:1974	0.01 – 5 %
		Chloride content, as NaCl	ISO 457:1983	0.01 – 2 %
1.3	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	0.1 – 5 %

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1.4	Toilet soap	Total fatty matter	SLS 34: Appendix C:2009	10 – 90 %
		Rosin acids content	SLS 34: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	0.5 – 5 %
		Total free alkali as NaOH	ISO 684:1974	0.5 – 5 %
		Chloride content, as NaCl	ISO 457:1983	0.1 – 3 %
1.5	Skin cream & lotions	pH at 27±2°C	SLS 611:Appendix C.3: 1983	1.0 – 14.0
		Non-volatile matter at 105°C	SLS 743:Appendix B: 2014	5 – 50 %
		Water content	SLS 611:Appendix C.5: 1983	5 – 95 %
		Lead	ISO/TR 17276:2014	4-10 mg/kg
		Arsenic		2-10 mg/kg
		Cadmium		1-10 mg/kg
		Mercury		0.1-10 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
1.6	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 %
		Lead	ISO/TR 17276:2014	4-10 mg/kg
		Arsenic		2-10 mg/kg
		Cadmium		1-10 mg/kg
		Mercury		0.1-10 mg/kg
1.7	After-shave Lotion	Ethanol content	SLS 534:Appendix A: 1981	10 – 95 %
1.8	Cologne			
1.9	Baby cologne		SLS 589:Appendix A: 1982	
1.10	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	1.0 – 14.0
		Lead	ISO/TR 17276:2014	4-10 mg/kg
		Arsenic		2-10 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
1.11	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	1 – 14.0
		Lead	ISO/TR 17276:2014	4-10 mg/kg
		Arsenic		2-10 mg/kg
		Cadmium		1-10 mg/kg
		Mercury		0.1-10 mg/kg
		1.12	Sanitary towels	Absorbency
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			0 – 20 %

<b>Sl 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>
1.13	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 – 14.0
		Inorganic salts	SLS 1342:Appendix D: 2008	1 – 10 %
		Lather volume	SLS 1342:Appendix E: 2008	10 – 200 ml
1.14	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 – 14.0
		Inorganic salts	SLS 1342:Appendix D: 2008	1 – 10 %
		Lather volume	SLS 1342:Appendix E: 2008	10 – 200 ml

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<b>2</b>	<b>Food and Agricultural Products</b>			
2.1	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 Rev:01	LOQ=0.01 mg/L
		Lead	AOAC 999.10: 2012	LOQ=0.04 mg/L
		Cadmium		LOQ= 0.004 mg/L
		Iron		LOQ=0.01 mg/L
		Zinc		LOQ=0.03 mg/L
		Nickel		
2.2	Tea (black tea)	Nickel		
		Caffeine	ISO 10727:2002	2 – 4 %
		Total Polyphenol	ISO 14502-1:2005	11 – 30 %

SI No	Product(s) / Material of test	Specific tests performed	Test Method / Standard against which tests are performed	Range of testing/ Limits of detection
2.3	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:Rev 00	1ppm-30,000ppm
2.4	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 %
2.5	Fruit juice & concentrates	Sulphur dioxide	AOAC 990.2.8 Monier Williams method: Year 2012	10 – 70 mg/kg
		Titrateable acidity	SLS 214: Appendix C: 2010	0.1-2 mg/kg
		Benzoic acid content	SLS 214:2010 Appendix-E	10mg/kg
		Sorbic acid content	SLS 214:2010 Appendix-E	10mg/kg



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2.6	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 (On dry basis)	ISO 930:1997 (SLS 186-4: 2008)	0.1 - 1%
		Crude fiber (On dry basis)	ASTA Method 7.0: 1997	1 – 40 %
2.7	cereals , corn flakes, full cream milk powder , skimmed milk powder	Lead	LCHE/TM/SOP/012,Rev 00	LOQ = 0.04 mg/L
		Cadmium		LOQ = 0.01 mg/L
		Mercury		
		Aluminum		
		Arsenic		LOQ = 0.02 mg/L
		Copper	LCHE/TM/SOP/008,Rev 00	LOQ=0.01 mg/L
		Manganese		LOQ=0.03 mg/L
		Magnesium		LOQ=0.05 mg/L
		Zinc		LOQ=0.03mg/L
		Calcium		LOQ=0.05 mg/L
		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 %
		Titrateable acidity, as lactic acid	SLS 735-2:1987	0.01 - 2.0 %
2.8	Shrimps/Prawns	Sodium metabisulphite, as SO <sub>2</sub>	AOAC 990.28: 2012	10 - 2000 mg/kg
2.9	Fish & fishery products (Maldive fish, dry fish)	Histamine content	AOAC 977.13: 2012	0.1 – 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
2.10	Edible fats & Oils coconut oil, palm oil, palm olein, palm sterain, palm kernel oil, sunflower seed oil (fatty acid methyl ester)	Butyric acid Caproic acid Caprylic acid Capric acid Undecanoic acid Lauric acid Tridecanoic acid Myristic acid Myristoleic acid Pentadecanoic acid cis-10-pentadecanoic acid Palmatic acid Palmitoleic acid Heptadecanoic acid cis-10-heptadecanoic acid Stearic acid Elaidic acid Oleic acid Linolelaidic acid	ISO 5508:1990	LOD 0.01 g/100g

Sl No	Product(s) / Material of test	Specific tests performed	Test Method / Standard against which tests are performed	Range of testing/ Limits of detection
2.11	Edible fats & oils coconut oil, palm oil, palm olein, palm sterain, palm kernel oil, sunflower seed oil (fatty acid methyl ester)	Linoleic acid	ISO 5508:1990	LOD 0.01 g/100g
		Arachidic acid		
		g-Linolenic acid		
		cis-11-eicosenoic acid		
		Linolenic acid		
		Heneicosanoic acid		
		cis-11-14-eicosatrienoic acid		
		Behenic acid		
		methyl cis-8,11,14-eicosatrienoate		
		Erucic acid		
		cis-11-14-17-eicosatrienoic acid		
		Arachidonic acid		
		Tricosanoic acid		
		cis-13,16-docosadienoic acid		
		cis-5,8,11,17-eicosapetaenoic acid		
		Nervonic acid		
		cis-4,7,10,13,16,19-docosahexaenoic acid		
		cis-13,16-docosadienoic acid		
		Lignoceric acid		
		Saturated fatty acids		
Mono unsaturated fatty acids				
Poly unsaturated fatty acids				
Trans fatty acids				

Sl No	Product(s) / Material of test	Specific tests performed	Test Method / Standard against which tests are performed	Range of testing/ Limits of detection
2.12	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: 2007)	0.01 – 1.00 %
		Moisture and volatile matter content	SLS 313-3:Section 5: 2009 (ISO 662:1998)	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: 2009 (ISO 3961: 2009)	5 – 160
		Saponification value	SLS 313-2:Section 1: 2009 (ISO 3657: 2002)	160 - 270
		Unsaponifiable matter content	SLS 313-4:Section 3: 2010 (ISO 3596: 2000)	0.50 – 3 %
		Slip melting point	SLS 313-1:Section 7: Annex A: 2009 (ISO 6321: 2002)	10 – 100.0 °C
2.13	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 %

Sl No	Product(s) / Material of test	Specific tests performed	Test Method / Standard against which tests are performed	Range of testing/ Limits of detection
2.14	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%
2.15	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 soluble in water other than NaCl		0-5%
		Matter insoluble in water on dry basis % by mass		0.01 - 2.0%
2.16	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%
		Matter soluble in water other than Sodium Chloride		0.5%
		Iodine content		10-50 mg/kg

<b>Sl 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>
2.17	White sugar	Polarization	SLS 191:1989	0-100%
		Loss on drying	SLS 191:Appendix C:1989	0.01 – 5.0 %
		Colour	SLS 191:Appendix E:1989	10 – 500 ICUMSA units
2.18	Soya sauce	pH	SLS 1035: Appendix D: 1995	2 - 8
		Salt as Sodium Chloride	SLS 1035: Appendix E: 1995	1 - 20 %
2.19	Biscuit	Moisture	SLS 1313:2007 & SLS 251: Appendix B: 2010	0.5 - 10%
		Acid Insoluble Ash	SLS 251: Appendix C: 2010	0.05 – 0.5%
		Acidity	SLS 251: Appendix D: 2010	0.05 - 2.0%

Sl No	Product(s) / Material of test	Specific tests performed	Test Method / Standard against which tests are performed	Range of testing/ Limits of detection
3	<b>Fertilizer</b>			
3.1	Sulphate of ammonia	Sulphur	AOAC 980.02 SLS 620:2014	22.7-24.5
		Arsenic as As	AOAC 2006.03: 2012 SLS 620:2014	2-100mg/kg
		Chromium as Cr		1-100mg/kg
		Lead as Pb		4-100mg/kg
		Mercury as Hg		0.1-10mg/kg
		Cadmium as Cd		1-100mg/kg
3.2	Urea (prilled and granular)	Arsenic as As	AOAC 2006.03: 2012 SLS 618:2014	2-100mg/kg
		Chromium as Cr		1-100mg/kg
		Lead as Pb		4-100mg/kg
		Mercury as Hg		0.1-10mg/kg
		Cadmium as Cd		1-100mg/kg
3.4	Potassium chloride MOP	Water soluble potassium content as K <sub>2</sub> O	SLS 644:2014 AOAC 983.02	59.5 - 63.5%
		Magnesium as MgCl <sub>2</sub>	SLS 644:2014 AOAC 965.09	0.1 - 1 %
		Arsenic as As	SLS 644:2014 AOAC 2006.03: 2012	2-100mg/kg
		Chromium as Cr		1-100mg/kg
		Lead as Pb		4-100mg/kg
		Mercury as Hg		0.1-10mg/kg
		Cadmium as Cd		1-100mg/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
3.5	TSP	Moisture	SLS 812:2014	0.5 - 5.0%
		Total Phosphate, as P <sub>2</sub> O <sub>5</sub>	SLS 644:2014	45.5 – 47.5%
		Water soluble phosphate, as P <sub>2</sub> O <sub>5</sub>		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	2-100mg/kg
		Chromium as Cr		1-100mg/kg
		Lead as Pb		4-100mg/kg
		Mercury as Hg		0.1-10mg/kg
3.6	Mixed Fertilizer	Magnesium (MgO)	SLS 645:PART 6 1990	23.2-29%
		Moisture	SLS 645 PART 2 1984	0.5-5.0%
		Potassium (K <sub>2</sub> O)	SLS 644:2014 AOAC 983.02:2012	59.5-63.5%
	Magnesium mono hydrate (kisserite)	Magnesium content as MgO	SLS 645:PART 6 1990	23.2-29%
		Mineral acid soluble sulfate as SO <sub>3</sub>	SLS 1104:2014 appendix C	45-58%
		Moisture	SLS 645 PART 2 1984	0.5-5.0%
		Calcium content as CaO	SLS 645:PART 6 1990	0.1-3.0%
		Water solubility	SLS 1104:2014 appendix D	19.5-40%
		Arsenic as As	AOAC 2006.03: 2012	2-100mg/kg
		Chromium as Cr		1-100mg/kg
		Lead as Pb		4-100mg/kg
		Mercury as Hg		0.1-10mg/kg
		Cadmium as Cd		1-100mg/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
3.7	Soil	Total Nitrogen	ISO 11261 :1995	1-50mg/kg
		Extractable P	ISO 11263 :1994	2-100mg/kg
		Exchangeable cation	ISO 13536:1995	2-40cmol/kg
		Organic carbon	ISO 14235 :1998	0.5-200mg/kg
		Exchangerble k	ISO 13536 :1995	2-100mg/kg
		Exchangerble Ca		
		Exchangerble Mg		
		Exchangerble Na		
		pH	ISO 10390:2005	1.5-14
		EC	ISO 11265 :1994	0.6-2000 $\mu$ S/cm
		Moisture (Oven method )	Manual of soil sampling and analysis (SSSSL) Chapter 5A:2007 Ed I	0.5-5.0%
		Chloride in Soil	Manual of soil sampling and analysis (SSSSL) Chapter 20:2007 Ed I	0.05-5.0%
		Available Sulphur	Manual of soil sampling and analysis (SSSSL) Chapter 21:2007 Ed I	0.05-5.0%

SI No	Product(s) / Material of test	Specific tests performed	Test Method / Standard against which tests are performed	Range of testing/ Limits of detection
3.7	Soil	Cadmium	EPA 3051A:2007	0.05-100mg/kg
		Chromium		2-100mg/kg
		Copper		1-100mg/kg
		Lead		2-100mg/kg
		Molybdenum	EPA 3051A:2007	1-100mg/kg
		Nickel		2-100mg/kg
		Vanadium		
		Zinc		
3.8	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				

Sl No	Product(s) / Material of test	Specific tests performed	Test Method / Standard against which tests are performed	Range of testing/ Limits of detection
4	<b>Water</b>			
4.1	RO water ,desalinated water	pH	APHA 4500-H <sup>+</sup> B: 2012 (22 <sup>nd</sup> Edition)	1.0 – 14.0
		Total Phosphorous, as P <sub>2</sub> O <sub>5</sub>	APHA 4500-P D: 2012 (22 <sup>nd</sup> Edition)	0.16 – 229.14 mg/L
		Total Phosphorous, as PO <sub>4</sub> <sup>3-</sup>	APHA 4500-P D: 2012 (22 <sup>nd</sup> Edition)	0.21 – 306.62 mg/L
		Alkalinity, as CaCO <sub>3</sub>	APHA 2320 B: 2012 (22 <sup>nd</sup> Edition)	2–1000 mg/L
		Nitrite, as N	APHA 4500-NO <sub>2</sub> <sup>-</sup> B: 2012 (22 <sup>nd</sup> Edition)	0.01 – 10.0 mg/L
		Hardness, as CaCO <sub>3</sub>	APHA 2340 C: 2012 (22 <sup>nd</sup> Edition)	2 - 1000 mg/L
		Nitrate, as N	APHA 4500-NO <sub>3</sub> <sup>-</sup> B: 2012 (22 <sup>nd</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: 2012 (22 <sup>nd</sup> Edition)	0.44 – 221.34 mg/L
		Free Ammonia, as N	APHA 4500-NH <sub>3</sub> D: 2012 (22 <sup>nd</sup> Edition)	0.04 – 0.65 mg/L
		Free Ammonia, as NH <sub>3</sub>	APHA 4500-NH <sub>3</sub> D: 2012 (22 <sup>nd</sup> Edition)	0.049 – 0.79 mg/L
		Free Ammonia, as NH <sub>4</sub> <sup>+</sup>	APHA 4500-NH <sub>3</sub> D: 2012 (22 <sup>nd</sup> Edition)	0.052 -0.837 mg/L
Fluoride, as F	APHA 4500-F <sup>-</sup> C: 2012 (22 <sup>nd</sup> Edition)	0.10-5.00 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
4.1	RO water, desalinated water	Aldrin	APHA 6630:2012	LOD 0.00 mg/l
		4,4-DDE		
		4,4-DDD		
		4,4-DDT		
		Dieldrin		
		alpha-Endosulfan		
		beta-Endosulfan		
		Endosulfan-sulfate		
		Endrin		
		Endrin- aldehyde		
		Endrin-ketone		
		alpha-HCH		
		beta-HCH		
		gamma-HCH		
		delta-HCH		
		Heptachlor		
		Heptachlor-epoxide		
		Methoxychlor		

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	RO water ,desalinated water	Nitrite, as NO <sub>2</sub> <sup>-</sup>	APHA 4500-NO <sub>2</sub> <sup>-</sup> B: 2012 (22 <sup>nd</sup> Edition)	0.03 – 32.85 mg/L
		Dissolve Oxygen	ASTM D888-12 (Method C)	0.1 – 20.0 mg/L
		Ammonical nitrogen, as N	APHA 4500-NH <sub>3</sub> C & D: 2012 (22 <sup>nd</sup> Edition)	5-200mg/L
		Residual chlorine, as Cl <sub>2</sub>	APHA 4500-Cl G: 2012 (22 <sup>nd</sup> Edition)	0.07 – 4.0 mg/L
		Free CO <sub>2</sub>	APHA 4500-CO <sub>2</sub> B: 2012 (22 <sup>nd</sup> Edition)	0.1 – 2000 mg/L
		Oil & Grease	APHA 5520 B: 2012 (22 <sup>nd</sup> Edition)	1 – 100 mg/L
		Total solids/ Dry Residues	APHA 2540 B: 2012 (22 <sup>nd</sup> Edition)	2– 2000 mg/L
		Total Suspended Solids	APHA 2540 D: 2012 (22 <sup>nd</sup> Edition)	2 – 500 mg/L
		Total Dissolved Solids	APHA 2540 C: 2012 (22 <sup>nd</sup> Edition)	3– 2000 mg/L
		Iron, as Fe	APHA 3500-Fe B: 2012 (22 <sup>nd</sup> Edition)	0.1 – 50.0 mg/L
4.2	Drinking water, processing water, potable water, raw water, RO water ,desalinated water	Chemical Oxygen Demand [COD]	APHA 5220 D: 2012 (22 <sup>nd</sup> Edition)	6 - 100 mg/L
		Calcium, as Ca	APHA 3500-Ca B: 2012 (22 <sup>nd</sup> Edition)	4 - 1000 mg/L
			APHA 3120 B: 2012 (22 <sup>nd</sup> Edition)	0.05 - 200mg/L
		Magnesium, as Mg	APHA 3500-Mg B: 2012 (22 <sup>nd</sup> Edition)	10 – 1000 mg/L
		Boron, as B	APHA 3120 B: 2012 (22 <sup>nd</sup> Edition)	0.05 - 200 mg/L
0.01 – 50 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
4.2	drinking water, processing water, potable water, raw water, RO water ,desalinated water	Cobalt, as Co	APHA 3120 B: 2012 (22 <sup>nd</sup> Edition)	0.01 – 10 mg/L
		Beryllium, as Be		0.05 – 10 mg/L
		Antimony, as Sb		0.01 – 10 mg/L
		Manganese, as Mn		0.05 - 10 mg/L
		Zinc, as Zn		0.01 - 10 mg/L
		Silver, as Ag		0.01 - 10 mg/L
		Arsenic, as As		0.05 - 10 mg/L
		Nickel, as Ni		0.01 - 100 mg/L
		Barium, as B		0.01 - 10 mg/L
		Lead, as Pb		0.01 – 5 mg/L
		Copper, as Cu		0.003 - 10 mg/L
		Aluminium, as Al		0.01 - 10 mg/L
		Vanadium, as V		0.01 – 10 mg/L
		Cadmium, as Cd		0.01 - 10 mg/L
		Chromium, as Cr		0.01 - 10 mg/L
		Selenium, as Se		
		Iron, as Fe		
Mercury, as Hg	LCHE/TM/SOP/040:Rev 00	1 - 50 µg/L		
Tin, as Sn	APHA 3113 B: 2012 (22 <sup>nd</sup> Edition)	0.05 - 5.0 mg/L		
Turbidity	APHA 2130 B: 2012 (22 <sup>nd</sup> Edition)	0.5-800 NTU		

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	Waste water	Total Phosphorous, as P <sub>2</sub> O <sub>5</sub>	APHA 4500-P D: 2012 (22 <sup>nd</sup> Edition)	0.16 – 229.14 mg/L
		Total Phosphorous, as PO <sub>4</sub> <sup>3-</sup>		0.21 – 306.62 mg/L
		Ammonical nitrogen, as N	APHA 4500-NH <sub>3</sub> C : 2012 (22 <sup>nd</sup> Edition)	5 – 200 mg/L
		Ammonical nitrogen, as NH <sub>3</sub>		6.08-243.18
		Silicate as Si	APHA 4500-SiO <sub>2</sub> C : 2012 (22 <sup>nd</sup> Edition)	0.23-46.74 mg/L
		Dissolve Oxygen	ASTM D888-12 (Method C)	0.1 – 20.0 mg/L
		Kjeldhal nitrogen, as N	APHA 4500-N <sub>org</sub> C: 2012 (22 <sup>nd</sup> Edition)	5 – 200 mg/L
		Kjeldhal nitrogen, as NH <sub>3</sub>		6.08-243.18mg/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
5	<b>Pesticide residues</b>			
5.1	Tea	Endrin-ketone alpha-HCH beta-HCH gamma-HCH delta-HCH Heptachlor Heptachlor-epoxide Methoxychlor Anthraquinone Diazinone Oxyfluorefen 4,4-DDD 4,4-DDE 4,4-DDT Aldrin Dieldrin alpha- Endosufan beta- Endosulfan Endrin Endrin aldehyde	LCHE/TM/SOP/001; Rev07	LOD 0.01 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
5.1	Tea	Acephate	LCHE/TM/SOP/064; Rev 02	LOD 0.01 mg/kg
		Acetamiprid		
		Imidachlorpid		
		Diuron		
5.2	Fruits & Vegetables	Bifenthrin	LCHE/TM/SOP/001;Rev 07 (Based on AOAC 2007.01 2012	LOD 0.01 mg/kg
		Chlorothalonil		
		Chlorpyrifos		
		Hexaconazole		
		Propiconazole		
		Dicofol		
		Bromopropylate		
		Chlorfluzuron		
		Cypermethrin		
		Flusilazole		
Etaxazole				

SI No	Product(s) / Material of test	Specific tests performed	Test Method / Standard against which tests are performed	Range of testing/ Limits of detection
5.2	Fruits & Vegetables	Ethion	LCHE/TM/SOP/001;Rev 007 (Based on AOAC 2007.01 2012)	LOD 0.01 mg/kg
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				
Dichlorvos				
Oxyfluorefen				

SI No	Product(s) / Material of test	Specific tests performed	Test Method / Standard against which tests are performed	Range of testing/ Limits of detection
5.2	Fruits & Vegetables	Aldrin	LCHE/TM/SOP/001;Rev 007	LOD 0.01 mg/kg
		4,4-DDE		
		4,4-DDD		
		4,4-DDT		
		Dieldrin		
		alpha-Endosulfan		
		beta-Endosulfan		
		Endosulfan-sulfate		
		Endrin		
		Endrin- aldehyde		
		Acephate	LCHE/TM/SOP/064;Rev 002	
		Acetamiprid		
		Imidachlorpid		
		Diuron		
		Thiamethoxam		
		Paraquate	LCHE/TM/SOP/065;Rev 002	
MCPA	LCHE/TM/SOP/076;Rev00			
2,4-D				

