

Laboratory	Aqua Designs India Private Limited, Laboratory Services Division, 200 Feet Road, Kolathur, Chennai, Tamil Nadu		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Chemical Testing	Issue Date	04.07.2014
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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
I.	WATER			
1.	Waste Water / Sea Water / Raw & Treated Liquid Effluents/Raw Treated Sewage Water	Temperature	IS 3025 (Part 9): 1984 (RA 2006)	0.1 °C to 100 °C
		Odour	IS 3025 (Part 5): 1983 (RA 2006)	Qualitative (Agreeable/Disagreeable)
		Turbidity	IS 3025 (Part 10): 1984 (RA 2006)	0.1 NTU to 400 NTU
		pH Value	IS 3025 (Part 11): 1983 (RA 2006)	1.0 to 14
		Electrical Conductivity	APHA (22 nd Edition) 2510B	1 µmhos/cm to 50000 µmhos/cm
		Total Suspended Solids	IS 3025 (Part 17): 1984 (RA 2006)	2 mg/l to 50000 mg/l
		Total Dissolved Solids	IS 3025 (Part 16): 1984 (RA 2006)	2 mg/l to 50000 mg/l
		Total Solids	IS 3025 (Part 15): 1984 (RA 2009)	2 mg/l to 50000 mg/l
		Fixed and Volatile Solids	IS 3025 (Part 18): 1984 (RA 2006)	2 mg/l to 50000 mg/l
		Sludge Volume Index	APHA (22 nd Edition) 2710D	2 mg/l to 50000 mg/l
		Chlorides as Cl ⁻	IS 3025 (Part 32): 1988 (RA 2009)	0.5 mg/l to 10000 mg/l
		Sulphates as SO ₄ ²⁻	APHA (22 nd Edition) 4500. SO ₄ .E	1 mg/l to 10000 mg/l

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		P.Alkalinity as CaCO ₃	IS 3025 (Part 23): 1986 (RA 2009)	1 mg/l to 10000 mg/l
		Total Alkalinity as CaCO ₃	IS 3025 (Part 23): 1986 (RA 2009)	1 mg/l to 10000 mg/l
		Total Hardness as CaCO ₃	APHA (22 nd Edition) 2340 C	1 mg/l to 5000 mg/l
		Calcium Hardness as CaCO ₃	APHA (22 nd Edition) 3500 Ca.B	1 mg/l to 3000 mg/l
		Magnesium Hardness as CaCO ₃	APHA (22 nd Edition) 3500 Mg.B	1 mg/l to 2000 mg/l
		Calcium as Ca	APHA (22 nd Edition) 3500 Ca.B	0.4 mg/l to 2000 mg/l
		Magnesium as Mg	APHA (22 nd Edition) 3500 Mg.B	1 mg/l to 2000 mg/l
		Total Iron as Fe	APHA (22 nd Edition) 3500 Fe.B	0.01 mg/l to 20 mg/l
		Dissolved Iron	APHA (22 nd Edition) 3500 Fe.B	0.01 mg/l to 20 mg/l
		Total Acidity as CaCO ₃	IS 3025 (Part 22): 1986 (RA 2009)	1 mg/l to 20000 mg/l
		Reactive Silica as SiO ₂	APHA (22 nd Edition) 4500- SiO ₂ .D	0.02 mg/l to 200 mg/l
		Carbonate Hardness as CaCO ₃	APHA (22 nd Edition) 2340A	Qualitative (by Calculation)
		Non - Carbonate Hardness as CaCO ₃	APHA (22 nd Edition) 2340A	Qualitative (by Calculation)
		Free Carbon Dioxide as CO ₂	APHA (22 nd Edition) 4500 CO ₂ -C	1 mg/l to 100 mg/l

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		Dissolved Oxygen as O ₂	IS 3025 (Part 38): 1989 (RA 2009)	0.2 mg/l to 25 mg/l
		Chemical Oxygen Demand (Cod)	IS 3025 (Part 58): 2006/ APHA (22 nd Edition) 5220 B	4 mg/l to 50000 mg/l
		Biological Oxygen Demand (Bod)	APHA (22 nd Edition) 5210 B (5days @ 20°C)/ IS 3025 (Part 44): 1993 (RA 2009) (3 Days @ 27°C)	2 mg/l to 20000 mg/l
		Free Residual Chlorine as Cl ₂	APHA (22 nd Edition) 4500 Cl.B	0.2 mg/l to 100 mg/l
		Nitrate Nitrogen as NO ₃	IS 3025 (Part 34): 1988 (RA 2009)	0.2 mg/l to 100 mg/l
		Nitrite Nitrogen as NO ₂ – N	IS 3025 (Part 34): 1988 (RA 2009)	0.2 mg/l to 1000 mg/l
		Total Phosphorus as PO ₄	IS 3025 (Part 31): 1988 (RA 2009)	0.05 mg/l to 50 mg/l
		Dissolved Phosphorus as PO ₄	IS 3025 (Part 31): 1988 (RA 2009)	0.05 mg/l to 50 mg/l
		Density	APHA (22 nd Edition) 2520 C / IS 3025 (Part 12): 1983 (RA 2006)	1.0 g/ml to 10 g/ml
		Hexavalent Chromium as Cr	IS 3025 (Part 52): 2003 (RA 2009)	0.03 mg/l to 20 mg/l
		Copper as Cu	IS 3025 (Part 42): 1992 (RA 2009)	0.05 mg/l to 5 mg/l

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		Manganese as Mn	APHA (22 nd Edition) 3500 Mn	0.05 mg/l to 20 mg/l
		Oil & Grease	APHA (22 nd Edition) 5520 B/ IS 3025 (Part 39): 1991 (RA 2009)	4 mg/l to 1000 mg/l
		Sulphite as SO ₃	APHA (22 nd Edition) 4500 SO ₃ 2-B	2 mg/l to 50 mg/l
		Aluminium as Al	IS 3025 (Part 55): 2003 (RA 2009)	0.03 mg/l to 50 mg/l
		Total Kjeldahl Nitrogen & Organic Nitrogen	IS 3025 (Part 34): 1988 (RA 2009) APHA (22 nd Edition) 4500 N- B, C	1 mg/l to 50 mg/l
		Free Ammonia as NH ₃	IS 3025 (Part 34): 1988 (RA 2009)	0.5 mg/l to 10 mg/l
		Ammonical Nitrogen as NH ₃ N	IS 3025 (Part 34): 1988 (RA 2009)/ APHA (22 nd Edition) 4500 NH ₃ B C	1 mg/l to 500 mg/l
		Fluoride as F	APHA (22 nd Edition) 4500 F B, D/ IS 3025 (Part 60): 2008	0.1 mg/l to 10.0 mg/l
		Boron as B	APHA (22 nd Edition) 4500 B/B/ IS 13428: 2005 (RA 2009) Amd. 3 Annexure H	0.1 mg/l to 10 mg/l

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		Phenolic Compound As C ₆ H ₅ OH	APHA (22 nd Edition) 5530 B, D/ IS 3025 (Part 43): 1992 (RA 2009) Amd. 2	0.01 mg/l to 3.0 mg/l
		Sulphide as S	APHA (22 nd Edition) 4500 S ²⁻ F/ IS 3025 (Part 29): 1986 (RA 2009)	0.5 mg/l to 100 mg/l
		Residual Sodium Carbonate	IS 11624: 1986 (RA 2009)	Qualitative (by Calculation)
		Particle Size of Suspended Solids	IS 6339: 1971 (RA 2011)	Qualitative (Pass/Fail)
		Cadmium as Cd	IS 3025 (Part 41): 1992 (RA 2009)/ APHA (22 nd Edition) 3111 B	0.01 mg/l to 5 mg/l
		Total Chromium as Cr	IS 3025 (Part 52): 2003 (RA 2009)/ APHA (22 nd Edition) 3111 B	0.05 mg/l to 5 mg/l
		Lead as Pb	IS 3025 (Part 47): 1994 (RA 2009) Amd. 2/ APHA (22 nd Edition) 3111 B	0.01 mg/l to 10 mg/l
		Cyanide as CN	IS 3025 (Part 27): 1986 (RA 2009) Amd. 1/ APHA (22 nd Edition) 4500 CN-C, E: 2009	0.01 mg/l to 5 mg/l

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		Zinc as Zn	IS 3025 (Part 49): 1994 (RA 2009) Amd. 1/ APHA (22 nd Edition) 3111 B: 2009	0.02 mg/l to 25 mg/l
		Selenium as Se	IS 3025 (Part 56): 2003 (RA 2009) / APHA (22 nd Edition) 3114 C	0.01 mg/l to 10 mg/l
		Arsenic as As	IS 3025 (Part 37): 1988 (RA 2009)/ APHA (22 nd Edition) 3114 B	0.02 mg/l to 10 mg/l
		Mercury as Hg	IS 3025 (Part 48): 1994 (RA 2009) Amd. 1/ APHA (22 nd Edition) 3112 B	0.001 mg/l to 10 mg/l
		Vanadium as V	APHA (22 nd Edition) 3500 V /B	0.05 mg/l to 10 mg/l
		Antimony as Sb	APHA (22 nd Edition) 3111 B IS 15303: 2003 (RA 2009)	0.005 mg/l to 10 mg/l
		Silver as Ag	APHA (22 nd Edition) 3111 B	0.01 mg/l to 10 mg/l
		Appearance	APHA (22 nd Edition) 2110	Physical appearance of Sample color
		Colour	APHA (22 nd Edition) 2120 B/ IS 3025 (Part 4): 1983 (RA 2006) Amd. 1	1 Hazen to 100 Hazen
2.	Drinking Water	Colour	APHA (22 nd Edition) 2120 B/ IS 3025 (Part 4): 1983 (RA 2006) Amd. 1	1 Hazen to 100 Hazen

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		Appearance	APHA (22 nd Edition) 2110	Physical appearance of Sample color
		Taste	IS 3025 (Part 8): 1984 (RA 2006)/ APHA (22 nd Edition) 2160 B	Qualitative (Agreeable / Disagreeable)
		Temperature	IS 3025 (Part 9): 1984 (RA 2006)	0.1 °C to 100 °C
		Odour	IS 3025 (Part 5): 1983 (RA 2006)	Qualitative (Agreeable/ Dis agreeable)
		Turbidity	IS 3025 (Part 10): 1984 (RA 2006)	0.1 NTU to 400 NTU
		pH Value	IS 3025 (Part 11): 1983 (RA 2006)	1 to 14
		Electrical Conductivity	APHA (22 nd Edition) 2510 B	1 µmhos/cm to 50,000 µmhos/cm
		Total Suspended Solids	IS 3025 (Part 17): 1984 (RA 2006)	2 mg/l to 50000 mg/l
		Total Dissolved Solids	IS 3025 (Part 16): 1984 (RA 2006)	2 mg/l to 50000 mg/l
		Chlorides as Cl ⁻	IS 3025 (Part 32): 1988 (RA 2009)	0.5 mg/l to 10000 mg/l
		Sulphates as SO ₄ ²⁻	APHA (22 nd Edition) 4500 SO ₄ E	1 mg/l to 10000 mg/l

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		P-Alkalinity as CaCO ₃	IS 3025 (Part 23): 1986 (RA 2009)	1 mg/l to 5000 mg/l
		Total Alkalinity as CaCO ₃	IS 3025 (Part 23): 1986 (RA 2009)	1 mg/l to 5000 mg/l
		Total Hardness as CaCO ₃	APHA (22 nd Edition) 2340 C/ 3-37	1 mg/l to 5000 mg/l
		Calcium Hardness as CaCO ₃	APHA (22 nd Edition) 3500 Ca B	1 mg/l to 3000 mg/l
		Magnesium Hardness as CaCO ₃	APHA (22 nd Edition) 3500 Mg B	1 mg/l to 2000 mg/l
		Calcium as Ca	IS 3025 (Part 40): 1991 (RA 2009)	0.4 mg/l to 2000 mg/l
		Magnesium as Mg	APHA (22 nd Edition) 3500 Mg B	1 mg/l to 2000 mg/l
		Total Iron as Fe	APHA (22 nd Edition) 3500 Fe B	0.01 mg/l to 20 mg/l
		Dissolved Iron as Fe	APHA (22 nd Edition) 3500 Fe B	0.01 mg/l to 20 mg/l
		Total Acidity as CaCO ₃	IS 3025 (Part 22): 1986 (RA 2009)	1 mg/l to 20000 mg/l
		Reactive Silica as SiO ₂	APHA (22 nd Edition) 4500-SiO ₂ D	0.02 mg/l to 100 mg/l
		Carbonate Hardness as CaCO ₃	APHA (22 nd Edition) 2340A	Qualitative (by Calculation)
		Non Carbonate Hardness as CaCO ₃	APHA (22 nd Edition) 2340A	Qualitative (by Calculation)
		Free Carbon Di Oxide as CO ₂	APHA (22 nd Edition) 4500 CO ₂ - C	1 mg/l to 100 mg/l

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		Free Residual Chlorine as Cl ₂	APHA (22 nd Edition) 4500 Cl.B	0.1 mg/l to 100 mg/l
		Nitrate Nitrogen as NO ₃	IS 3025 (Part 34): 1988 (RA 2009)	0.2 mg/l to 100 mg/l
		Hexavalent Chromium as Cr	IS 3025 (Part 52): 2003 (RA 2009)	0.02 mg/l to 20 mg/l
		Copper as Cu	IS 3025 (Part 42): 1992 (RA 2009) Amd. 1/ APHA (22 nd Edition) 3111B	0.05 mg/l to 5 mg/l
		Manganese as Mn	APHA (22 nd Edition) 3500 Mn	0.05 mg/l to 20 mg/l
		Aluminium as Al	IS 3025 (Part 55): 2003 (RA 2009)	0.03 mg/l to 1 mg/l
		Fluoride as F	APHA (22 nd Edition) 4500 F B, D IS 3025 (Part 60): 2008	0.1 mg/l to 10.0 mg/l
		Boron as B	APHA (22 nd Edition) B/B IS 13428: 2005 (RA 2009) Amd. 4 Annexure H	0.1 mg/l to 10 mg/l
		Phenolic Compound As C ₆ H ₅ OH	APHA (22 nd Edition) 5530 B, D/ IS 3025 (Part 43): 1992 (RA 2009) Amd. 2	0.01 mg/l to 3.0 mg/l
		Cadmium as Cd	IS 3025 (Part 41): 1992 (RA 2009)/ APHA (22 nd Edition) 3111 B	0.01 mg/l to 5 mg/l

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		Total Chromium as Cr	IS 3025 (Part 52): 2003 (RA 2009)/ APHA (22 nd Edition) 3111 B: 2009	0.05 mg/l to 5 mg/l
		Lead as Pb	IS 3025 (Part 47): 1994 (RA 2009) Amd. 2/ APHA (22 nd Edition) 3111 B	0.01 mg/l to 10 mg/l
		Cyanide as CN	IS 3025 (Part 27): 1986 (RA 2009) Amd. 1/ APHA (22 nd Edition) 4500 CN-C, E	0.01 mg/l to 5 mg/l
		Zinc as Zn	IS 3025 (Part 49): 1994 (RA 2009) Amd. 1/ APHA (22 nd Edition) 3111 B	0.02 mg/l to 25 mg/l
		Selenium as Se	IS 3025 (Part 56): 2003 (RA 2009)/ APHA (22 nd Edition) 3114 C	0.01 mg/l to 10 mg/l
		Arsenic as As	IS 3025 (Part 37): 1988 (RA 2009)/ APHA (22 nd Edition) 3114 B	0.02 mg/l to 10 mg/l
		Mercury as Hg	IS 3025 (Part 48): 1994 (RA 2009) Amd. 1 APHA (22 nd Edition) 3112 B	0.001 mg/l to 10 mg/l
		Mineral Oil	ADIPL/SOP/CD/WW/073 (Issue date. 23.10.2013) IS 3025 (Part 39) Clause. 6 Infra red Partition Method	0.2 mg/l to 20 mg/l

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		Benzene	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		Bromobenzene	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		Bromochloromethane	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		Bromodichloromethane	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		Bromoform	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		Carbon Tetrachloride	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		Chlorobenzene	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		Chloroform	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l

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		Cis 1,3 Dichloropropane	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		Cis 1,2 Dichloroethylene	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		Cumene	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		Dibromochloromethane	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		Dibromomethane	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		Ethylbenzene	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		Hexachlorobutadiene	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		P,M Xylene	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		Methylene Chloride	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l

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	N Butyl Benzene		ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
	Napthalene		ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
	O Xylene		ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
	P - Isopropyltoluene		ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
	Styrene		ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
	Sec Butylbenzene		ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
	Tetra Butyl Benzene		ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
	Toluene		ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
	Tetrachloroethane		ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l

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		Trans 1,3 Dichloropropane	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		Trans 1,2 Dichloroethylene	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		Trichloroethylene	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		1,1 Dichloroethane	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		1,1 Dichloroethylene	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		1,1 Dichloropropene	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		1,1,1 Trichloroethane	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		1,1,1,2 Tetrachloroethane	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		1,1,2 Trichloroethene	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		1,1,2,2 Tetrachloroethane	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		1,2 Dibromo 3 Chloropropane	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		1,2 Dibromoethane	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		1,2 Dichlorobenzene	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		1,2 Dichloropropane	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		1,2 Dichloroethane	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		1,2,3 Trichlorobenzene	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		1,2,3 Trichloropropane	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		1,2,4trichlorobenzene	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l

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		1,2,4 Trimethyl Benzene	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		1,3 Dichloropropane	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		1,3,5 Trimethyl Benzene	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		1,4 Dichlorobenzene	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		2 Chlortoluene	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		2,2 Dichloropropane	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		N-Propyl Benzene	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		1,3 Dichlorobenzene	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l
		4 Chlorotoluene	ADIPL/SOP/CD/WW/075 by GC MS, Issue date. 05.11.2013 (USEPA 8260B/8260C)	1 µg/l to 200 µg/l

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3.	Water For Construction Purpose	Organic Solids	IS 3025 (Part 18): 1984 (RA 2006) Amd. 1	1 mg/l to 1000 mg/l
		In Organic Solids	IS 3025 (Part 18): 1984 (RA 2006) Amd. 1	1 mg/l to 5000 mg/l
		Sulphate as SO ₄	IS 3025 (Part 24): 1986 (RA 2009) APHA (22 nd Edition) 4500 SO ₄ ²⁻ B	1 mg/l to 5000 mg/l
		Chloride as Cl ⁻	IS 3025 (Part 32): 1988 (RA 2009) APHA (22 nd Edition) 4500 Cl B	1 mg/l to 1000 mg/l
		Suspended Matter	IS 3025 (Part 17): 1984 (RA 2006) Amd. 1	2 mg/l to 1000 mg/l
		pH @ 25°C	IS 3025 (Part 11): 1983 (RA 2006) APHA (22 nd Edition) 4500 H ⁺ B	1 to 14
		Total Hardness as CaCO ₃	IS 3025 (Part 22): 1986 (RA 2003)	0.1 mg/l to 100 mg/l
		Iron as Fe	IS 3025 (Part 53): 1986 (RA 2003)	0.01 mg/l to 5 mg/l
		Manganese as Mn	IS 3025 (Part 59): 2006	0.01 mg/l to 5 mg/l
		Oxidizable Matter	IS 1069): 1993 (RA 2008)	1 mg/l to 100 mg/l
Specific Electrical Conductivity @ 25c	IS 3025 (Part 14): 2006	1 µmhos/cm to 200000 µmhos/cm		

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Total Dissolved Solids	IS 3025 (Part 16): 1986 (RA 2009)	1 mg/l to 100 mg/l
4.	Feed Water, Boiler Water & Condensate Water For High Pressure Boiler IS 10496: 1994 Feed Water & Boiler Water For Low & Medium Pressure Boiler	pH Value	IS 3025 (Part 11): 1983 (RA 2006) APHA (22 nd Edition) 4500 H ⁺ B	1 to 14
		Total Hardness as CaCO ₃	APHA (22 nd Edition) 2340 C	1 mg/l to 5000 mg/l
		Dissolved Oxygen	IS 3025 (Part 38): 1989 (RA 2009) APHA (22 nd Edition) 4500 O ₂ B, C	0.2 mg/l to 8.0 mg/l
		Iron as Fe	APHA (22 nd Edition) 3500 Fe B	0.01 mg/l to 5 mg/l
		Copper as Cu	IS 3025 (Part 42): 1992 (RA 2009) Amd. 1 APHA (22 nd Edition) 3500Cu B	0.02 mg/l to 10 mg/l
		Silica as SiO ₂	IS 3025 (Part 35): 1988 (RA 2009) APHA (22 nd Edition) 4500 SiO ₂ C, D	0.2 mg/l to 100 mg/l
		Oxygen Consumed in 4 Hrs	IS 3025 (Part 63): 2007	0.1 mg/l to 100 mg/l
		Total Alkalinity as CaCO ₃	IS 3025 (Part 23): 1986 (RA 2009) Amd. 2 APHA (22 nd Edition) 2320 B	1 mg/l to 1000 mg/l
		Caustic Alkalinity as CaCO ₃	APHA (22 nd Edition) 2320 B	1 mg/l to 1000 mg/l

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		Total Phosphorous as P	IS 3025 (Part 31): 1988 (RA 2009) APHA (22 nd Edition) 4500 P B, D	0.01 mg/l to 100 mg/l
		Total Dissolved Solids	IS 3025 (Part 16): 1984 (RA 2006) Amd. 1 / APHA (22 nd Edition) 2540C	1 mg/l to 1000 mg/l
		Total Suspended Solids	IS 3025 (Part 17): 1984 (RA 2006) Amd. 1 / APHA (22 nd Edition) 2540D	1 mg/l to 1000 mg/l
		Chlorides as Cl ⁻	IS 3025 (Part 32): 1988 (RA 2009) APHA (22 nd Edition) 4500 Cl ⁻ B	1 mg/l to 1000 mg/l
		Ammonia as NH ₃	IS 3025 (Part 34): 1988 (RA 2009)	0.01 mg/l to 20 mg/l
5.	Swimming Pool Water	pH @ 25 °C	IS 3025 (Part 11): 1983 (RA 2006)/ APHA (22 nd Edition) 4500 H ⁺ B	1 to 14
		Total Alkalinity as CaCO ₃	IS 3025 (Part 23): 1986 (RA 2003) Amd. 2/ APHA (22 nd Edition) 2320 B: 2009	1 mg/l to 10000 mg/l
		Aluminium as Al	IS 3025 (Part 55): 2003 (RA 2009) APHA (22 nd Edition) 3111D	0.03 mg/l to 10 mg/l
		Residual Chlorine	IS 3025 (Part 26): 1986 (RA 2009) Amd. 1/ APHA (22 nd Edition) 4500 Cl B	0.1 mg/l to 10 mg/l

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		Oxygen Observe in 4 h@ 27 °C	IS 3025 (Part 63): 2007	0.2 mg/l to 100 mg/l
		Chloride as Cl ⁻	IS 3025 (Part 32): 1988 (RA 2009)	1 mg/l to 5000 mg/l
		Heavy Metals as Pb	IS 7017: 1973 (RA 2010)	0.01 mg/l to 10 mg/l
		Color (Hazen Unit)	IS 3025 (Part 4): 1983 (RA 2006) Amd. 1 APHA (22 nd Edition) 2220 B	1 Hazen to 100 Hazen
		Turbidity as NTU	IS 3025 (Part 10): 1984 (RA 2006) APHA (22 nd Edition) 2230 B	0.5 NTU to 100 NTU / 101 NTU to 200 NTU
		Odour	IS 3025 (Part 5): 1983 (RA 2006)	Qualitative (Odour / Odourless)
		Taste	IS 3025 (Part 8): 1984 (RA 2006)	Qualitative (Palatable)
		Total Dissolved Solids	IS 3025 (Part 16): 1984 (RA 2003) Amd. 1	1 mg/l to 5000 mg/l
		Iron as Fe	IS 3025 (Part 53): 2003 (RA 2009)	0.01 mg/l to 5 mg/l
6.	Storage Batteries Water	Non-Volatile Residue	IS 1069: 1993 (RA 2008)	1 mg/l to 10000 mg/l
		Chloride as Cl ⁻	IS 3025 (Part 32): 1988 (RA 2009)	1 mg/l to 10000 mg/l

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		pH @ 25 °C	IS 3025 (Part 11): 1983 (RA 2006) APHA (22nd Edition) 4500 H ⁺ B	1 to 14
		Heavy Metals as Pb	IS 7017: 1973 (RA 2010)	0.01 mg/l to 10 mg/l
		Total Hardness as CaCO ₃	IS 3025 (Part 21): 1983 (RA 2006)	0.1 mg/l to 100 mg/l
		Iron as Fe	IS 3025 (Part 53 2003 (RA 2009)	0.01 mg/l to 20 mg/l
		Manganese	IS 3025 (Part 59): 2006	0.01 mg/l to 5 mg/l
		Oxidizable Matter	IS 1069: 1993 (RA 2008)	0.2 mg/l to 100 mg/l
		Specific Electrical Conductivity @ 25° C	IS 3025 (Part 14): 1984 (RA 2006)	1 µmhos/cm to 200000 µmhos/cm
		Total Dissolved Solids	IS 3025 (Part 16): 1984 (RA 2006) Amd. 1	2 mg/l to 100 mg/l
7.	Natural Mineral Water, Packaged Drinking Water	Color	IS 3025 (Part 4): 1983 (RA 2006) Amd. 1 APHA (22 nd Edition) 2220 B: 2009,	1 Hazen to 100 Hazen
		Odour	IS 3025 (Part 5): 1983 (RA 2006) APHA (22 nd Edition) 2150 B	Qualitative (Agreeable / Disagreeable)
		Taste	IS 3025 (Part 8): 1984 (RA 2006) APHA (22 nd Edition) 2160 B	Qualitative (Agreeable / Disagreeable)

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		Turbidity	IS 3025 (Part 10): 1984 (RA 2006)/ APHA (22 nd Edition) 2130 B	1 NTU to 400 NTU
		Total Dissolved Solids	IS 3025 (Part 16): 1984 (RA 2006) Amd. 1/ APHA (22 nd Edition) 2540 C	10 mg/l to 2000 mg/l
		pH	IS 3025 (Part 11): 1983 (RA 2006) APHA (22 nd Edition) 4500 H ⁺ B	1 to 14
		Nitrate as NO ₃	IS 3025 (Part 34): 1988 (RA 2009)	1 mg/l to 100 mg/l
		Nitrite as NO ₂	IS 3025 (Part 34): 1988 (RA 2009) APHA (22 nd Edition) 4500 NO ₂ B	0.01 mg/l to 10 mg/l
		Sulfide as S	IS 3025 (Part 29): 1986 (RA 2009) APHA (22 nd Edition) 4500S F	0.02 mg/l to 4.0 mg/l
		Manganese as Mn	IS 3025 (Part 59): 2006 APHA (22 nd Edition) 3111 B	0.01 mg/l to 10 mg/l
		Copper as Cu	IS 3025 (Part 42): 1992 (RA 2009) Amd. 1 APHA (22 nd Edition) 3111 B	0.02 mg/l to 10 mg/l
		Zinc as Zn	IS 3025 (Part 49): 1994 (RA 2009) Amd. 1 APHA (22 nd Edition) 3111 B	0.02 mg/l to 10 mg/l

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		Fluoride as F	IS 3025 (Part 60): 2008 APHA (22 nd Edition) 4500 F B, D IS 13428: 2005 (RA 2009) Amd. 4	0.1 mg/l to 5.0 mg/l
		Barium as Ba	IS 15302: 2003 (RA 2009) APHA (22 nd Edition) 3111 D	0.1 mg/l to 10 mg/l
		Antimony as Sb	IS 13428: 2005 RA : 2009 Amd. 4/ IS 15303: 2003 (RA 2009)	0.005 mg/l to 1 mg/l
		Borates as B	IS 13428: 2005 (RA 2009) Amd. 4	0.1 mg/l to 5 mg/l
		Silver as Ag	IS 13428: 2005 (RA 2009) Amd. 4/ APHA (22 nd Edition) 3111 B	0.01 mg/l to 1 mg/l
		Chloride as Cl ⁻	IS 3025 (Part 32): 1988 (RA 2009) / APHA (22 nd Edition) 4500 Cl ⁻ B	1 mg/l to 1000 mg/l
		Sulphate as SO ₄	IS 3025 (Part 24): 1986 (RA 2009) / APHA (22 nd Edition) 4500 SO ₄ B	1 mg/l to 5000 mg/l
		Magnesium as Mg	IS 3025 (Part 46): 1994 (RA 2009) Amd. 2/ APHA (22 nd Edition) 3500 Mg B	0.5 mg/l to 1000 mg/l
		Calcium as Ca	IS 3025 (Part 40): 1991 (RA 2009) Amd. 1/ APHA (22 nd Edition) 3500 Ca B,	0.5 mg/l to 1000 mg/l

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		Sodium as Na	IS 3025 (Part 45): 1993 (RA 2009) Amd. 1/ APHA (22 nd Edition) 3500 Na.B	1 mg/l to 20000 mg/l
		Alkalinity As CaCO ₃ or HCO ₃	IS 3025 (Part 23): 1986 (RA 2009) Amd. 2/ APHA (22 nd Edition) 2320 B	1 mg/l to 1000 mg/l
		Selenium as Se	IS 3025 (Part 56): 2003 (RA 2009) APHA (22 nd Edition) 3114 B	0.01 % to 10 mg/l
		Phenolic Compound as C ₆ H ₅ OH	IS 3025 (Part 43): 1992 (RA 2009) Amd. 2	0.01 5 to 3.0 mg/l
		Arsenic as As	IS 3025 (Part 37): 1988 (RA 2009)/ APHA (22 nd Edition) 3114 B	0.02 mg/l to 1 mg/l
		Cadmium as Cd	IS 3025 (Part 41): 1992 (RA 2009) / APHA (22 nd Edition) 3111 B	0.01 mg/l to 10 mg/l
		Cyanide as CN	IS 3025 (Part 27): 1986 (RA 2009) Amd. 1/ APHA (22 nd Edition) 4500 CN– C,E	0.01 mg/l to 5 mg/l
		Chromium as Cr	IS 13428: 2005 (RA 2009) Amd. 4/ IS 3025 (Part 52): 2003 (RA 2009)	0.05 mg/l to 5 mg/l
		Mercury as Hg	IS 3025 (Part 48): 1994 (RA 2009) Amd. 1 / APHA (22 nd Edition) 3112 B	0.001 mg/l to 1mg/l

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		Lead as Pb	IS 3025 (Part 47): 1994 (RA 2009) Amd. 2/ APHA (22 nd Edition) 3111 B	0.01 mg/l to 1 mg/l
		Nickel as Ni	IS 13428: 2005 (RA 2009) Amd. 4/ IS 3025 (Part 54): 2003 (RA 2009)	0.02 mg/l to 10 mg/l
		Conductivity	IS 3025 (Part 14): 1984 (RA 2006)	2 µmhos/cm to 20000 µmhos/cm
		Aluminium as Al	IS 3025 (Part 55): 2003 (RA 2009) / APHA (22 nd Edition) 3500-Al	0.03 mg/l to 50 mg/l
		Iron as Fe	IS 3025 (Part 53): 2003 (RA 2009)	0.01 mg/l to 20 mg/l
		Total Hardness as CaCO ₃	IS 3025 (Part 21): 1983 (RA 2006)	1 mg/l to 8000 mg/l
		Residual Free Chlorine	IS 3025 (Part 26): 1986 (RA 2009) Amd. 1/ APHA (22 nd Edition) 4500 Cl B	0.2 mg/l to 100 mg/l
		Pesticides Residues		
		O,P -DDT	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l
		P,P -DDT	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l
		O,P- DDE	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l
		P,P -DDE	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l

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		O,P- DDD	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l
		P,P -DDD	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l
		Gamma HCH (Lindane)	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l
		Alpha HCH	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l
		Beta HCH	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l
		Delta HCH	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l
		Alpha Endosulfan	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l
		Beta Endosulfan	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l
		Endosulfansulphate	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l
		Monocrotophos	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l
		Ethion	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l
		Chlorpyrifos	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l
		Phorate	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l
		Phoratesulphoxide	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l
		Phoratesulphone	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l
		Butachlor	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l
		Isoproturon	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l

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		Alachor	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l
		Atrazine	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l
		Methyl Parathion	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l
		Methyl Paraoxon	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l
		Malathion	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l
		Malaaxon	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l
		Aldrin	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l
		Dieldrin	USEPA 525.2: 1996	0.01 µg/l to 100 µg/l
		2,4 -Dichlorophenoxyacetic Acid	ADIPL/SOP/CD/WW/074 by LCMSMS (Issue date. 12.10.2013) USEPA 525.2: 1996	0.01 µg/l to 20 µg/l 0.02
		<u>Polynuclear Aromatic Hydrocarbons (PAH)</u>		
		Acenaphthene	EPA 3510C: 1996	0.1 µg/l to 2.0 µg/l
		Acenaphthylene	EPA 3510C: 1996	0.1 µg/l to 2.0 µg/l
		Anthracene	EPA 3510C: 1996	0.1 µg/l to 2.0 µg/l

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	Phenanthrene		EPA 3510C: 1996	0.1 µg/l to 2.0 µg/l
	Benz(A) Anthracene		EPA 3510C: 1996	0.1 µg/l to 2.0 µg/l
	Chrysene		EPA 3510C: 1996	0.1 µg/l to 2.0 µg/l
	Benzo(B) Fluoranthene		EPA 3510C: 1996	0.1 µg/l to 2.0 µg/l
	Benzo(A)Pyrene		EPA 3510C: 1996	0.1 µg/l to 2.0 µg/l
	Benzo(K) Fluoranthene		EPA 3510C: 1996	0.1 µg/l to 2.0 µg/l
	Indeno(1,2,3-Cd)Perylene		EPA 3510C: 1996	0.1 µg/l to 2.0 µg/l
	Benzo(G,H,I) Perylene		EPA 3510C: 1996	0.1 µg/l to 2.0 µg/l
	Dibenzo(A,H)Anthracene		EPA 3510C: 1996	0.1 µg/l to 2.0 µg/l
	Fluoranthene		EPA 3510C: 1996	0.1 µg/l to 2.0 µg/l
	Pyrene		EPA 3510C: 1996	0.1 µg/l to 2.0 µg/l
	Fluorene		EPA 3510C: 1996	0.1 µg/l to 2.0 µg/l
	Naphthalene		EPA 3510C: 1996	0.1 µg/l to 2.0 µg/l
	Polychlorinated Biphenyl(Pcb)			
	2,4,4'-Trichlorobiphenyl		EPA 3510C: 1996 / EPA 8082: 2007	0.05 µg/l to 2.0 µg/l
	2,2',5,5'-Tetrachlorobiphenyl		EPA 3510C: 1996 / EPA 8082: 2007	0.05 µg/l to 2.0 µg/l

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		2,2',4,5,5'pentachlorobiphenyl	EPA 3510C: 1996 / EPA 8082: 2007	0.05 µg/l to 2.0 µg/l
		2,2',3,4,4',Hexachlorobiphenyl	EPA 3510C: 1996 / EPA 8082: 2007	0.05 µg/l to 2.0 µg/l
		2,2',4,4',5,5'hexachlorobiphenyl	EPA 3510C: 1996 / EPA 8082: 2007	0.05 µg/l to 2.0 µg/l
		2,2',3,4,4',5,5'heptachlorobiphenyl	EPA 3510C: 1996 / EPA 8082: 2007	0.05 µg/l to 2.0 µg/l
8.	Water Drinking, Packaged Water, Drinking Water and Process Water	Chromium as Cr	ADIPL/SOP/CDWW/076	0.002 mg/l to 20 mg/l
		Lead as Pb	USEPA 200.2 and USEPA 200.8 ICP MS	
		Cadmium as Cd		
		Molybdenum as Mo		
		Selenium as Se		
		Arsenic as As		
		Copper as Cu		
		Manganese as Mn		
		Antimony as Sb		
		Silver as Ag		

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II. AIR , GASES & ATMOSPHERE				
1.	Ambient Air Monitoring	Suspended Particulate Matter	IS 5182 (Part 4): 1999 (RA 2010)	5.0 µg/m ³ to 500 µg/m ³
		Repairable Particulate Matter / PM ₁₀	IS 5182 (Part 23): 2006 / USEPA IO 2.3	2.0 µg/m ³ to 500 µg/m ³
		Sulphur Dioxide as SO ₂	IS 5182 (Part 2): 2001 (RA 2006)	2.0 µg/m ³ to 100 µg/m ³
		Oxides of Nitrogen as NO ₂	IS 5182 (Part 6): 2006	2.0 µg/m ³ to 100 µg/m ³
		Carbon Monoxide	IS 5182 (Part 10): 1999 (RA 2009)	1.15 mg/m ³ to 100 mg/m ³
		Pm- 2.5	Gravimetric Method (PM 2.5 Federal Reference Method FRM 35(4) 339:342)/CPCB Guidelines for the measurement of ambient air pollutants, Vol. I, May 2011.	2 µg/m ³ to 500 µg/m ³
		Ammonia	Methods for ambient air sampling & analysis by James P.Lodge, Method #401	1 µg/m ³ to 250 µg/m ³
		Oxidants as O ₃	Methods for ambient air sampling & analysis by James P.Lodge, Method #411	1 µg/m ³ to 500 µg/m ³
		Lead	Methods for ambient air sampling & analysis by James P.Lodge, Method # 303A	0.005 µg/m ³ to 5 µg/m ³
Nickel	Methods for ambient air sampling & analysis by James P.Lodge, Method # 303A	3 ng/m ³ to 30 ng/m ³		

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		Arsenic	Methods for ambient air sampling & analysis by James P.Lodge, Method # 302	5 ng/m ³ to 10 ng/m ³
		Benzene	IS 5182 (Part 11): 2006	0.1 µg/m ³ to 10 µg/m ³
		Benzo (A) Pyrene	IS 5182 (Part 12): 2004 (RA 2009)	0.15 ng/m ³ to 10 ng/m ³
2.	Ambient /Work Zone	VOC Mix – M 502A(60 Compounds)		
		Benzene	ADIPL/SOP/CDA/14 by GC MS(Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
		Bromo Benzene	ADIPL/SOP/CDA/14 by GC MS(Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
		Bromochloro Methane	ADIPL/SOP/CDA/14 by GC MS(Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
		Bromodichloro Methane	ADIPL/SOP/CDA/14 by GC MS(Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
		Bromoform	ADIPL/SOP/CDA/14 by GC MS(Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
		N-Butylbenzene	ADIPL/SOP/CDA/14 by GC MS(Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³

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	Tert-Butylbenzene		ADIPL/SOP/CDA/14 by GC MS(Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
	Sec-Butyl Benzene		ADIPL/SOP/CDA/14 by GC MS(Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
	Carbon Tetra Chloride		ADIPL/SOP/CDA/14 by GC MS(Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
	Chlororbenzene		ADIPL/SOP/CDA/14 by GC MS(Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
	Chloroform		ADIPL/SOP/CDA/14 by GC MS(Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
	2-Chlorotoluene		ADIPL/SOP/CDA/14 by GC MS(Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
	4-Chlorotoluene		ADIPL/SOP/CDA/14 by GC MS(Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
	Dibromo Chloromethane		ADIPL/SOP/CDA/14 by GC MS(Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
	1,2-Dibrom-3-Chlor-Propan		ADIPL/SOP/CDA/14 by GC MS(Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³

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	1,2-Dibromo Ethane		ADIPL/SOP/CDA/14 by GC MS(Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
	Dibromo Methane		ADIPL/SOP/CDA/14 by GC MS(Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
	1,2-Dichlorobenzene		ADIPL/SOP/CDA/14 by GC MS(Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
	1,3-Dichlorobenzene		ADIPL/SOP/CDA/14 by GC MS(Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
	1,4-Dichlorobenzene		ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
	1,1-Dichloroethane		ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
	Cis 1,2 Dichloroethylene		ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
	Ethene, 1,1-Dichloro		ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
	1,1-Dichlorethane		ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³

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		2,2-Dichloropropane	ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
		Cis 1,3 Dichloropropene	ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
		Trans-1,3-Dichloropropene	ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
		1,1-Dichloropropene	ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
		Ethylbenzene	ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
		Hexachlorobutadiene	ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
		Isopropylbenzene	ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
		Methylene Chloride	ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
		Naphthalene	ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³

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	N-Propylbenzene		ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
	Styrene		ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
	Ethane, 1,1,2,2-Tetrac...		ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
	1,1,1,2-Tetrachloroethane		ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
	Tetrachloroethene		ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
	Toluene		ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
	1,2,3-Trichlorobenzene		ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
	1,2,4-Trichlorobenzene		ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
	1,1,1-Trichlorethane		ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³

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		1,1,2-Trichloroethane	ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
		Trichloroethylene	ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
		Propane, 1,2,3-Trichloro	ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
		Benzene, 1,2,4-Trimethyl-	ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
		Benzene, 1,3,5-Trimethyl-	ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
		P,M-Xylene	ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
		O-Xylene	ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
		Sec-Butyl Benzene	ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
		Bromoemthane	ADIPL/SOP/CDA/14 by GC MS (Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³

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		Chloroethane	ADIPL/SOP/CDA/14 by GC MS(Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
		Dichlorodifluoromethane	ADIPL/SOP/CDA/14 by GC MS(Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
		Trichloromonofluoromethane	ADIPL/SOP/CDA/14 by GC MS(Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
		Chloromethane	ADIPL/SOP/CDA/14 by GC MS(Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
		Vinly Chloride	ADIPL/SOP/CDA/14 by GC MS(Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
		1,3-Dichloropropane	ADIPL/SOP/CDA/14 by GC MS(Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
		1,2-Dichloroethane	ADIPL/SOP/CDA/14 by GC MS(Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
		Trans 1,2-Dichloroethane.	ADIPL/SOP/CDA/14 by GC MS(Issue date. 10.10.2013) (USEPA to 17)	5 µg/m ³ to 250 µg/m ³
3.	Stack Emission Monitoring	Velocity	IS 11255 (Part 3): 2008	1.5 m/s to 60 m/s

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		Temperature	IS 11255 (Part 3): 2008	Ambient (-)600 °C
		Flow Rate	IS 11255 (Part 3): 2008	5 Nm ³ /h to 80000 Nm ³ /h
		Particulate Matter	IS 11255 (Part 1): 1985 (RA 2009)	4.8 mg/Nm ³ to 1000 mg/ Nm ³
		Sulphur Dioxide as SO ₂	IS 11255 (Part 2): 1985 (RA 2009)	3.4 mg/Nm ³ to 1000 mg/Nm ³
		Oxides of Nitrogen as NO ₂	IS 11255 (Part 7): 2005	2 mg/Nm ³ to 400 mg/Nm ³
		Co	IS 13270: 1992 (RA 2009) Flue Gas Analyzer (Direct Meter reading)	0.2 % to 25 % 0.2 ppm to 100 ppm
		Co ₂	IS 13270: 1992 (RA 2009) Flue Gas Analyzer (Direct Meter reading)	0.2 % to 20 % 0.2 ppm to 100 ppm
		O ₂	IS 13270: 1992 (RA 2009) Flue Gas Analyzer (Direct Meter reading)	0.2 % to 25 % 0.2 ppm to 100 ppm
		Acid Mist (H ₂ SO ₄)	EPA Method 8	2 mg/Nm ³ to 500 mg/Nm ³
		Ammonia	IS 11255 (Part 6): 1999 (RA 2009)	5 mg/Nm ³ to 150 mg/Nm ³
III. POLLUTION & ENVIRONMENT				
1.	Soil	pH @ 25 °c	IS 2720 (Part 26): 1987 (RA 2011)	1 to 14
		Dry Matter	IS 15106: 2002 (RA 2007)	50 % to 90 %

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		Water Content	IS 15106: 2002 (RA 2007)	1 % to 50 %
		Specific Electrical Conductivity	IS 14767: 2000 (RA 2010)	1 µmhos/cm to 1000 µmhos/cm
		Total Soluble Sulphate	IS 2720 (Part 27): 1977 (RA 2010)	0.05 % to 10 %
		Calcium Carbonates	IS 2720 (Part 23): 1976 (RA 2010)	0.005 % to 30 %
		Total Soluble Solids	IS 2720 (Part 21): 1977 (RA 2010), Amd. 1	0.01 % to 50 %
		Cation Exchange Capacity	IS 2720 (Part 24): 1976 (RA 2010), Amd. 1	1 % to 20 %
		Organic Matter	IS 2720 (Part 22): 1972 (RA 2010), Amd. 1	0.1 % to 50 %
		Nitrogen and Nitrogenous Compounds	IS 14684: 1999 (RA 2008)	2 mg/kg to 1000 mg/kg
		Oil and Grease	APHA (22 nd Edition) 5520-E: 2005	1 mg/kg to 1000 mg/kg
2.	Soil, Sludge & Solid Waste	pH @ 25 °c	IS 10158: 1982 (RA 2009)	1 to 14
		Moisture Content	IS 9235: 1979 (RA 2009) Amd. 1	0.1 % to 30 %
		Total Kjeldhal Nitrogen	IS 10158: 1982 (RA 2009)	10 mg/kg to 1000 mg/kg
		Phosphorus	IS 10158: 1982 (RA 2009)	1 mg/kg to 5000 mg/kg
		Calcium as Ca	EPA 3050 B: 1996 (Rev. 2.0)	2 mg/kg to 5000 mg/kg

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		Magnesium as Mg	EPA 3050 B: 1996 (Rev. 2.0)	2 mg/kg to 5000 mg/kg
		Potassium	EPA 3050 B: 1996 (Rev. 2.0)	2 mg/kg to 5000 mg/kg
		Aluminium as Al	EPA 3050 B: 1996 (Rev. 2.0)	2 mg/kg to 5000 mg/kg
		Barium as Ba	EPA 3050 B: 1996 (Rev. 2.0)	2 mg/kg to 5000 mg/kg
		Silver as Ag	EPA 3050 B: 1996 (Rev. 2.0)	2 mg/kg to 500 mg/kg
		Copper as Cu	EPA 3050 B: 1996 (Rev. 2.0)	2 mg/kg to 5000mg/kg
		Iron as Fe	EPA 3050 B: 1996 (Rev. 2.0)	5 mg/kg to 50000 mg/kg
		Manganese as Mn	EPA 3050 B: 1996 (Rev. 2.0)	5 mg/kg to 5000 mg/kg
		Zinc as Zn	EPA 3050 B: 1996 (Rev. 2.0)	5 mg/kg to 5000 mg/kg
		Lead as Pb	EPA 3050 B: 1996 (Rev. 2.0)	2 mg/kg to 5000 mg/kg
		Cadmium as Cd	EPA 3050 B: 1996 (Rev. 2.0)	2 mg/kg to 5000 mg/kg
		Chromium as Cr	EPA 3050 B: 1996 (Rev. 2.0)	2 mg/kg to 5000 mg/kg
		Nickel as Ni	EPA 3050 B: 1996 (Rev. 2.0)	5 mg/kg to 5000 mg/kg
		Antimony as Sb	EPA 3050 B: 1996 (Rev. 2.0)	2 mg/kg to 5000 mg/kg
		Arsenic as As	EPA 7062: 1996	2 mg/kg to 5000 mg/kg
		Mercury as Hg	EPA 7471 B: 2007(Rev. 2)	0.5 mg/kg to 5000 mg/kg
		Selenium as Se	EPA 7740 B: 1996	1 mg/kg to 5000 mg/kg

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		Pesticides		
	Aldrin		ADIPL/SOP/CD/SO/21/GC MSMS (Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg
	Dieldrin		ADIPL/SOP/CD/SO/21/GC MSMS (Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg
	Alpha BHC		ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg
	Gamma BHC		ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg
	Delta BHC		ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg
	Beta BHC		ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg
	Alpha Endosulfan		ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg
	Beta Endosulfan		ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg
	Endosulfan Sulphate		ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg

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		O,P - DDD	ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg
		P,P - DDD	ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg
		O,P - DDT	ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg
		P,P - DDT	ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg
		O,P - DDE	ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg
		P,P - DDE	ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg
		Alachlor	ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg
		Atrazine	ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg
		Butachlor	ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg

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		Phorate	ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg
		Chlorpyrifos	ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg
		Chlorpyrifos Methyl	ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg
		Methyl Parathion	ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg
		Methyl Paraxone	ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg
		Malaoxone	ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg
		Malathion	ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg
		Phorate Sulfone	ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg
		Phorate Sulfoxide	ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)C)	0.025 µg/kg to 25 µg/kg

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		Hexachlorobenzene	ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg
		Isoproturon	ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg
		2,4- D	ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg
		Ethion	ADIPL/SOP/CD/SO/21/GC (MSMS Issue date. 12.11.2012) (USEPA 3540 C)	0.025 µg/kg to 25 µg/kg
5.	Hazardous Waste	Paint Filter Liquid Test	SW 846-9095A: 2008	Qualitative (Pass/Fail)
		Bulk Density	ASTM D 5057-90: 1996	0.2 g/cc to 3 g/cc
		pH	USEPA 2008 SW- 846: 9045 C	1 to 14
		Flash Point	USEPA 2008, SW-846: 1020A	Ambient (-)300 °C
		Moisture Content	IS 326 (Part 21): 2001 (RA 2006)	1 % to 100 %
		Loss On Ignition At 550°C (Dry Basis)	APHA (22 nd Edition): 2540	1 % to 90 %
		Calorific Value	IS 1350 (Part 2): 1975 (RA 2010) Amd. 1	200 cal/g to 15000 cal/g

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		Oil & Grease / Extractable Organics	USEPA 3540 C: 1998, SW-846: 2008	1 % to 90 %
		% Water Soluble Inorganic Substances	APHA (22 nd Edition) 2540 E	1 % to 99 %
		% Water Soluble Organic Substances	APHA (22 nd Edition) 2540 E	1 % to 99 %
		Reactive Cyanide as HCN	USEPA 2008,SW-846: 9014	1 mg/kg to 10000 mg/kg
		Total Cyanide as CN-	USEPA 2008,SW-846: 9014 APHA (22 nd Edition) 4500 CN K: 2005	1 mg/kg to 10000 mg/kg
		Total Sulfide as S2-	USEPA: 1998,SW-846: 9225	10 mg/kg to 1000 mg/kg
		Reactive Sulphide	USEPA: 1998,SW-846: 9034	1 mg/kg to 10000 mg/kg
		Ammonia (WLT)	APHA (22 nd Edition) 4500-NH ₃ B	1 mg/l to 10000 mg/l
		Total Cyanide (Wlt)	USEPA: 1998,SW-846: 9014	1 mg/l to 10000 mg/l
		Total Cyanide (Tclp)	USEPA: 1998,SW-846: 9014	1 mg/l to 10000 mg/l
		Tclp(Toxicity Characteristic Leaching Procedure)	USEPA: 1998,SW-846: 1311	NA
		Copper (Total)	USEPA SW 846: 3050 B,7210	1 mg/kg to 10000 mg/kg
		Copper (WLT)	USEPA SW 846: 3010A,7210	0.1 mg/l to 10000 mg/l
		Copper (TCLP)	USEPA SW 846: 3010A,7210	0.1 mg/l to 10000 mg/l

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		Iron as Fe(TCLP)	APHA (22 nd Edition) 3500 Fe B	1 mg/l to 10000 mg/l
		Iron as Fe(Total)	APHA (22 nd Edition) 3500 Fe B	5 mg/kg to 100000 mg/kg
		Iron as Fe(WLT)	APHA (22 nd Edition) 3500 Fe B	1 mg/l to 10000 mg/l
		Lead (Total)	USEPA SW 846: 7420,3050 B	10-100000 mg/kg
		Lead (TCLP)	USEPA SW 846: 7420,3010A	0.1 mg/l to 10000 mg/l
		Lead (WLT)	USEPA SW 846: 7420,3010A	0.1 mg/l to 10000 mg/l
		Nickel (Total)	USEPA SW 846: 7420,3010 A	5 mg/kg to 100000 mg/kg
		Nickel (TCLP)	USEPA SW 846: 7420,3010 A	1 mg/l to 10000 mg/l
		Nickel (WLT)	USEPA SW 846: 7420,3050B	1 mg/l to 10000 mg/l
		Zinc (Total)	USEPA SW 846: 7950,3050B	5 mg/kg to 100000 mg/kg
		Zinc (WLT)	USEPA SW 846: 7950,3010A	1 mg/l to 10000 mg/l
		Zinc (TCLP)	USEPA SW 846: 7950,3050B	1 mg/l to 10000 mg/l
		Arsenic (Total)	APHA (22 nd Edition) 3114 B	10 mg/kg to 50000 mg/kg
		Arsenic (TCLP)	APHA (22 nd Edition) 3114 B	0.1 mg/l to 1000 mg/l
		Arsenic (WLT)	APHA (22 nd Edition) 3114 B	0.1 mg/l to 1000 mg/l
		Cadmium (Total)	USEPA: 1998, SW 846: 7130,3050B	0.5 mg/kg to 100000 mg/kg
		Cadmium (TCLP)	USEPA: 1998, SW 846: 7130,3010 A	0.1 mg/l to 10000 mg/l

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		Cadmium (WLT)	USEPA: 1998, SW 846: 7130,3010 A	0.1 mg/l to 10000 mg/l
		Total Chromium (Total)	USEPA SW 846: 7190,3050 B	5 mg/kg to 100000 mg/kg
		Total Chromium (Tclp)	USEPA SW 846: 7190,3010A	0.5 mg/l to 10000 mg/l
		Chromium-VI (TCLP)	USEPA SW 846: 7196A	0.2 mg/l to 10000 mg/l
		Chromium-VI (WLT)	USEPA SW 846: 7196A	0.2 mg/l to 10000 mg/l
IV. FOOD & AGRICULTURAL PRODUCTS				
1.	Oil and Fats (Including Ground Nut/Sesame/Cocconut/Maize/Corn/Ricebran/Sunflower/Safflower/Animal Tallow/Margarine/Ghee)	Moisture	IS 548 (Part 1): 1964 (RA 2010)	0.1 % to 1 %
		Insoluble Impurities	IS 548 (Part 1): 1964 (RA 2010)	0.05 % to 0.50 %
		Free Fatty Acids	IS 548 (Part 1): 1964 (RA 2010)	0.5 % to 10 %
		Acid Value	IS 548 (Part 1): 1964 (RA 2010)	0.5 to 20
		Saponification Value	IS 548 (Part 1): 1964 (RA 2010)	50 to 275
		Unsaponifiable Matter	IS 548 (Part 1): 1964 (RA 2010)	0.5 % to 5 %
		Iodine Value	IS 548 (Part 1): 1964 (RA 2010)	5 to 200
		Peroxide Value	IS 548 (Part 1): 1964 (RA 2010)	1 meq/kg to 5 meq/kg
		Acetyl Value/ Hydroxyl Value	IS 548 (Part 1): 1964 (RA 2010)	0.5 to 200
		Test For Mineral Oil	IS 548 (Part 1): 1964 (RA 2010)	Qualitative (Present or Absent)
	Test For Ground Nut Oil	IS 548 (Part 1): 1964 (RA 2010)	Qualitative	

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		Test For Sesame Oil	IS 548 (Part 1): 1964 (RA 2010)	(Present or Absent) Qualitative (Present or Absent)
		Test For Castor Oil	IS 548 (Part 1): 1964 (RA 2010)	Qualitative (Present or Absent)
		Refractive Index	IS 548 (Part 1): 1964 (RA 2006) /DGHS Lab Manual 2,2005	1.3 to 1.7
		Melting Point	IS 548 (Part 1): 1964 (RA 2006) /DGHS Lab Manual 2,2005	30 °C to 60 °C
		Flash Point	IS 1448 (Part 20): 1998/ DGHS Lab Manual 2 2005, IS 548 (Part 1): 1964 (RA 2006)	38 °C to 350 °C
		Specific Gravity	IS 548 (Part 1): 1964 (RA 2010)/ DGHS Lab Manual 2,2005	0.8 to 0.95
		Rancidity	DGHS Lab Manual 2,2005	Qualitative (Present/Absent)
		Presence of Semi Siccative	DGHS- lab Manual 2,2005	Qualitative (Present/Absent)
		Presence of Olive Pomace	DGHS Lab Manual 2,2005	Qualitative (Present/Absent)
		Test For Presence of Poly Bromide	DGHS Lab Manual 2,2005/ IS 548 (Part 1): 1964 (RA 2010)	Qualitative (Present/Absent)

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2.	Animal Feeds(Including Oil Cakes/Poultry Feed /Shrimp Feed/Fish Feed)	Moisture	IS 7874 (Part 1): 1975 (RA 2004)	5 % to 20 %
		Total Ash	IS 7874 (Part 1): 1975 (RA 2004)	0.5 % to 40 %
		Acid Insoluble Ash	IS 7874 (Part 1): 1975 (RA 2004)	0.3 % to 10 %
		Crude Fat	IS 7874 (Part 1): 1975 (RA 2004)	0.5 % to 20 %
		Crude Fiber	IS 7874 (Part 1): 1975 (RA 2004)	0.5 % to 30 %
		Crude Protein	IS 7874 (Part 1): 1975 (RA 2004)	5 % to 65 %
		Salt as Nacl	IS 7874 (Part 1): 1975 (RA 2004)	0.5 % to 5 %
		Calcium as Ca	IS 7874 (Part 1): 1975 (RA 2004) / AOAC (19 th Edition): 2012	0.01 % to 5 %
		Phosphorous as P	IS 7874 (Part 1): 1975 (RA 2004) / AOAC (19 th Edition): 2012	0.5 % to 10 %
		Energy	Pearson's Composition and analysis of food (9 th Edition): 1991. (by calculation)/ DGHS Lab Manual 3,2005	(25 kcal to 1000 kcal) /100 g
	Carbohydrate	DGHS Lab Manual 3,2005	Qualitative (by Calculation)	
	Pesticides			
	Aldrin	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg	

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		Dieldrin	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg
		Alpha BHC	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg
		Gamma BHC	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg
		Delta BHC	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2001: 2012	0.01 mg/kg to 20 mg/kg
		Beta BHC	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg
		Alpha Endosulfan	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg
		Beta Endosulfan	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg

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		Endosulfan Sulphate	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg
		O,P - DDD	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg
		P,P - DDD	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg
		O,P - DDT	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg
		P,P - DDT	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg
		O,P - DDE	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg
		P,P - DDE	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg

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	Alachlor		ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg
	Atrazine		ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg
	Butachlor		ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg
	Phorate		ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg
	Chlorpyrifos		ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg
	Chloropyrifos Methyl		ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg
	Methyl Parathion		ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg

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	Methyl Paraoxon		ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg
	Malaoxon		ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg
	Malathion		ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg
	Phorate Sulfone		ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg
	Phorate Sulfoxide		ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg
	Hexachlorobenzene		ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg
	Isoproturon		ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg

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		2,4 D	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg
		Ethion	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 mg/kg to 20 mg/kg
3.	Dairy & Dairy Products: (Including Raw/ Sterilized/ Pasteurized/ Boiled/ Homogenized/ Flavored/ Tonned	Description	IS 1165: 2002 (RA 2009)	NA
		Flavor & Taste	IS 1165: 2002 (RA 2009)	NA
		Moisture	AOAC (19 th Edition) 9205/ 920.116: 2012; IS 11623: 2008	1 % to 10 %
		Ash	AOAC (19 th Edition) 945.46: 2012, IS 11623: 2008	0.1 % to 10 %
		Total Solids	AOAC (19 th Edition) 990.19: 2012, IS 11623: 2008	10 % to 99 %
		Fat	AOAC (19 th Edition) 989.05, 905.02: 2012; IS 11721: 2003/ IS 1224 (Part 2): 1977 (RA 2009)	1 % to 50 %
		Solids-Non-Fat (Snf)	AOAC (19 th Edition) 990.21 : 2012	5 % to 90 %

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		Protein	AOAC (19 th Edition) 991.20: 2012	1 % to 25 %
		Carbohydrates	AOAC (19 th Edition) 986.25: 2012, NIN, IS 1656: 2007	40 % to 60 %
		Free Fatty Acids	AOAC (19 th Edition) 940.28: 2012	0.10 % to 5 %
		Milk Fat	AOAC (19 th Edition) 989.05, 905.02: 2012; IS 11721: 2005	1 % to 50 %
		Milk Solids	AOAC (19 th Edition): 2012 IS 11623: 2008	1 % to 50 %
		Milk Protein	AOAC (19 th Edition) 991.20: 2012	1 % to 10 %
		Titrateable Acidity	IS 1165: 2002; AOAC (19 th Edition) 9305: 2012	0.1 % to 40 %
		Total Ash	AOAC (19 th Edition) 9405: 2012	0.05 % to 20 %
		pH	AOAC (19 th Edition) 981.12: 2012	1.0 to 14
		Energy	Pearson's Composition and analysis of food (9 th Edition): 1991 (by calculation)/ DGHS Lab Manual 1,2005	(25 kcal to 1000 kcal) /100 g
		Carbohydrate	AOAC (19 th Edition) 986.25: 2012, /DGHS Lab Manual 1,2005	Qualitative (by Calculation)

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		Density	AOAC (19 th Edition) 925.22: 2012,	0.5 g/cc to 2.0 g/cc
		Acid Insoluble Ash in Dil Hcl	DGHS Lab Manual 3,2005 / IS 1011: 2002 (RA 2009)	0.01 % to 10 %
4.	Milk	Adulterants Cane Sugar, Cellulose, Starch, Added Urea, Glucose, Ammonium Sulfate, Saccharin, Foreign Fat, Glucose, Sodium Chloride	DGHS Lab Manual 1: 2005	Qualitative (Present or Absent)
		Neutralisers Hypochlorites and Chloramines, Quarternary Ammonium Compounds, Detergents Containing Alkylbenzene Sulfonic Acids, Skimmed Milk Powder, Gelatin.	DGHS Lab Manual 1: 2005	Qualitative (Present or Absent)
		Preservatives Formalin, Hydrogen Peroxide, Boric Acid & Borates, Salicylic Acid	DGHS Lab Manual 1: 2005	Qualitative (Present or Absent)
5.	Spices & Spice Products (Whole & Ground) (Including Chilli/ Chillipowder/ Turmeric/ Turmeric Powder/ Curry Powder/ Chilliolesins /	Physical Examination		
		Extraneous Matter	IS 4333 (Part 2): 1996 (RA 2012) IS 3579: 1996 (RA 2000)	0.01 % to 20 %
		Insect Damaged Matter	IS 4333 (Part 2): 1996 (RA 2012) IS 3579: 1996 (RA 2000)	0.01 % to 10 %
		Empty / Malformed Capsules	IS 4333 (Part 2): 1996 (RA 2012) IS 3579: 1996 (RA 2000)	0.01 % to 50 %

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	Cardamom/ Masala)	Immature and Shriveled Capsules	IS 4333 (Part 2): 1996 (RA 2012) IS 3579: 1996 (RA 2000)	0.01 % to 20 %
		Broken	IS 4333 (Part 2): 1996 (RA 2012) IS 3579: 1996 (RA 2000)	0.01 % to 20 %
		Tendrils	IS 4333Part 2): 1996,RA 2012 IS 3579: 1996 (RA 2000)	0.04 % to 50 %
		Headless Cloves	IS 4333 (Part 2): 1996 (RA 2012) IS 3579: 1996 (RA 2000)	0.01 % to 50 %
		Split Fruits	IS 4333 (Part 2): 1996 (RA 2012) IS 3579: 1996 (RA 2000)	0.01 % to 5 %
		Damaged/ Discoloured Fruits	IS 4333 (Part 2): 1996 (RA 2012) IS 3579: 1996 (RA 2000)	0.01 % to 5 %
		Added Coloring Matter	DGHS Lab Manual 10: 2005	Qualitative (Soluble or Not Soluble)
		Volatile Oil Content	IS 1797: 1989 (RA 2009)	1 % to 100 %
		Rodent Hair & Excreta	DGHS Lab Manual 10,2005	Qualitative (Present or Absent)
		Chemical Test		
	Moisture	AOAC (19 th Edition) 941.11: 2012; IS 1797: 1985 (RA 2009)	1 % to 20 %	
	Total Ash	AOAC (19 th Edition) 941.12: 2012;	0.05 % to 25 %	

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			IS 1797: 1985 (RA 2009)	
	Acid Insoluble Ash		AOAC (19 th Edition) 941.12: 2012; IS 1797: 1985 (RA 2009)	0.01 % to 20 %
	Non-Volatile Ether Extract		AOAC (19 th Edition) 940.29: 2012	0.5 % to 30 %
	Volatile Oil/Essential Oils		IS 1797: 1985 (RA 2009) ASTA (4 th Edition): 11	0.1 % to 50 %
	Protein		AOAC (19 th Edition) 970.55, 962.17: 2012; IS 1797: 1985 (RA 2009)	0.5 % to 20 %
	Crude Fibre		AOAC (19 th Edition) 920.165: 2012; IS 1797: 1985 (RA 2009)	0.5 % to 30 %
	Curcumin		AOAC (19 th Edition) 920.169: 2012; IS 1797: 1985 (RA 2009)	1 % to 10 %
	Sulphite Residues		ASTA (4 th Edition) 18.0	10 mcg/g to 1000 mcg/g
	Salt as Nacl		AOAC (19 th Edition) 990.28: 2012	0.1 % to 10 %
	Solubility in Cold Water On Dry Wet Basis		IS 1797: 1985 (RA 2009)	15 % to 90 %
	Total Nitrogen On Dry Basis		IS 1797: 1985 (RA 2009) DGHS Lab Manual 10,2005	0.1 % to 25 %

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6.	Food Grains / Cereals & Pulses (Whole & Ground)	Chemical Test		
		Moisture	IS 1155: 1968 (RA 2010) IS1010: 2000, IS1009: 1979 (RA 2010)	1 % to 15 %
		Total Ash	IS 1155: 1968 (RA 2010) IS1010: 2000, IS1009: 1979 (RA 2010)	0.05 % to 10 %
		Acid Insoluble Ash	IS 1155: 1968 (RA 2010) IS1010: 2000, IS1009: 1979 (RA 2010)	0.01 % to 10 %
		Gluten	IS 1155: 1968 (RA 2010) IS1010: 2000, IS1009: 1979 (RA 2010)	1 % to 15 %
		Crude Fibre	IS 1155: 1968 (RA 2010) IS1010: 2000, IS1009: 1979 (RA 2010)	0.5 % to 10 %
		Alcoholic Acidity	IS 1155: 1968 (RA 2010) IS1010: 2000, IS1009: 1979 (RA 2010)	0.01 % to 1 %
		Granularity	IS 1155: 1968 (RA 2010) IS1010: 2000, IS1009: 1979 (RA 2010)	0.1 % to 100 %
		Iron	AOAC (19 th Edition) 944.02: 2012	0.5 ppm to 100 ppm

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		Energy	Pearson's Composition and analysis of food (9 th Edition): 1991. (by calculation)/ DGHS Lab Manual 3,2005	(25 kcal to 1000 kcal) /100 g
		Carbohydrate	DGHS Lab Manual 3,2005	Qualitative (by Calculation)
		Fat	AOAC (19 th Edition) 920.85: 2012	0.1 % to 30 %
		Protein	AOAC (19 th Edition) 960.52: 2012	0.5 % to 25 %
		Acidity Extracted Fat	IS 1011: 2002 (RA 2006)	0.01 % to 15 %
		Foreign Mater	DGHS Lab Manual 3,2005	Qualitative (Present/Absent)
		Mineral Matter	DGHS Lab Manual 3,2005	Qualitative (Present/Absent)
		Organic Matter	DGHS Lab Manual 3,2005	Qualitative (Present/Absent)
		Rodent Hair & Excreta	DGHS Lab Manual 3,2005	Qualitative (Present/Absent)
		Insect Damaged Weevilled Grains	IS 4333 (Part 1): 1996 (RA 2009)	0.01 % to 15 %
		Other Edible Grains	IS 4333 (Part 5): 1996 (RA 2009)	0.01 % to 10 %
		Damaged Grains	IS 4333 (Part 1): 1996 (RA 2009)	0.01 % to 10 %
		Test For Mineral Oil	DGHS Lab Manual 3,2005	Qualitative (Present/Absent)

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		Argemone Seeds	DGHS Lab Manual 3,2005	Qualitative (Present/Absent)
		Khesari Dal	DGHS Lab Manual 3,2005	Qualitative (Present/Absent)
		Insect	DGHS Lab Manual 3,2005	Qualitative (Present/Absent)
		Microscopic Examination	DGHS Lab Manual 3,2005	Qualitative (Present/Absent)
		Presence of Mould	DGHS Lab Manual 3,2005	Qualitative (Present/Absent)
		Uric Acid	ADIPL/SOP/CDF-C & P/015 (Issue date. 15.02.2014)	10 ppm to 200 ppm
		Pesticides		
		Dieldrin	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 ppm to 10 ppm
		Carbaryl	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 ppm to 10 ppm
		Chlordane	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 ppm to 10 ppm

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		Diazinon	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 ppm to 10 ppm
		Dichlorvos	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 ppm to 10 ppm
		Fenitrothion	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 ppm to 10 ppm
		Heptachlor	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 ppm to 10 ppm
		Chlorienvinphos	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 ppm to 10 ppm
		Paraquat Dichloride	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 ppm to 10 ppm
		Trichlorfon	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 ppm to 10 ppm
		Thiometon	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012)	0.01 ppm to 10 ppm

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			AOAC (19 th Edition) 2007.01: 2012	
	Carbendazim		ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 ppm to 10 ppm
	Benomyl		ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 ppm to 10 ppm
	Carbofuran		ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 ppm to 10 ppm
	Deltamethrin		ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 ppm to 10 ppm
	Fention		ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 ppm to 10 ppm
	Phenthoate		ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 ppm to 10 ppm
	Pirimiphos Methyl		ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012)	0.01 ppm to 10 ppm

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			AOAC (19 th Edition) 2007.01: 2012	
		Oxydemeton Methyl	ADIPL/SOP/F&A/002/GCMSMS (Issue date. 12.11.2012) AOAC (19 th Edition) 2007.01: 2012	0.01 ppm to 10 ppm
7.	Beverages	Energy	Pearson's Composition and analysis of food (9 th Edition): 1991. (by calculation)/ DGHS Lab Manual 4,2005	(25 kcal to 1000 kcal) /100 g
		Carbohydrate	DGHS Lab Manual 4,2005	Qualitative (by Calculation)
		Moisture	AOAC (19 th Edition) 925.19: 2012	1 % to 20 %
		Total Ash	AOAC (19 th Edition) 920.100: 2012	1 % to 20 %
		Crude Fibre	AOAC (19 th Edition) 920.102: 2012.	0.05 % to 10 %
		Water Soluble Ash	AOAC (19 th Edition) 920.100: 2012.	1 % to 50 %
		Acid Insoluble Ash	AOAC (19 th Edition) 920.100: 2012.	0.01 % to 2 %
		Cold Water Solubility	IS 2791: 1992 (RA 2009)	Qualitative (Soluble or Not Soluble)
		Hot Water Solubility	IS 2791: 1992 (RA 2009)	Qualitative

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				(Soluble or Not Soluble)
		Chicory Test	DGHS Lab Manual 4,2005	Qualitative (Present or Absent)
		Alkalinity of Water Soluble Ash	DGHS Lab Manual 4,2005	0.1 % to 15 %
		Rodent Hair and Excreta	DGHS Lab Manual 3,2005	Qualitative (Present or Absent)
		Foreign Mater	DGHS Lab Manual 3,2005	Qualitative (Present or Absent)
		Caffeine	ADIPL/SOP/CD/F&A/007 (Issue date. 10.10.2013), AOAC (19 th Edition) 980.14: 2012	1 mg/kg to 500 mg/kg
8.	Nuts and Nut Products	Energy	Pearson's Composition and analysis of food (9 th Edition): 1991. (by calculation)/ DGHS Lab Manual 3,2005	(25 kcal to 1000 kcal)/ 100 g
		Carbohydrate	DGHS Lab Manual 3,2005	Qualitative (by Calculation)
		Moisture	AOAC (19 th Edition) 925.19: 2012	1 % to 20 %
		Total Ash	AOAC (19 th Edition) 920.100: 2012	1 % to 10 %
		Crude Fibre	AOAC (19 th Edition) 920.102: 2012	0.05 % to 10 %

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		Protein	AOAC (19 th Edition) 920.85: 2012	0.05 % to 20 %
		Fat	AOAC (19 th Edition) 920.103: 2012	0.1 % to 5 %
		Acid Insoluble in Ash	AOAC (19 th Edition) 920.100: 2012	0.01 % to 5 %
		Acidity Extracted Fat	IS 1011: 2002 (RA 2006)	0.01 % to 15 %
		Foreign Mater	DGHS Lab Manual 3,2005	Qualitative (Present/Absent)
		Mineral Matter	DGHS Lab Manual 3,2005	Qualitative (Present/Absent)
		Organic Matter	DGHS Lab Manual 3,2005	Qualitative (Present/Absent)
		Rodent Hair & Excreta	DGHS Lab Manual 3,2005	Qualitative (Present/Absent)
9.	Bakery & Bakery Products	Moisture	DGHS Lab Manual 3,2005/ IS 1011: 2002 (RA 2009)	1 % to 20 %
		Total Ash	DGHS Lab Manual 3,2005/ IS 1011: 2002 (RA 2009)	0.5 % to 40 %
		Acid Insoluble Ash	DGHS Lab Manual 3,2005 / IS 1011: 2002 (RA 2009)	0.01 % to 10 %
		Fat	IS 11721: 2005 (RA 2010)	0.1 % to 20 %
		Crude Fiber	DGHS Lab Manual 3,2005/ IS 1155: 1968 (RA 2010)	0.1 % to 30 %

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		Crude Protein	DGHS Lab Manual 3,2005/ AOAC (19 th Edition) 991.20: 2012	3 % to 65 %
		Salt as Nacl	DGHS Lab Manual 3,2005/ IS 3507: 1966 (RA 2012)	0.1 % to 20 %
		Acidity Extracted Fat	DGHS Lab Manual 3,2005/ IS 1011: 2002 (RA 2009)	0.1 % to 20 %
		Energy	Journal of food composition and analysis 10, 102-114(1997) Article No.FC 9700527 (by calculation)	(25 kcal to 1000 kcal) /100 g
		Carbohydrate	DGHS Lab Manual 3,2005/ IS 1656: 2007 (RA 2012) (by Calculation)	Qualitative (by Calculation)
10.	Heavy Metals Cereals & Cereal Products/ Spices & Condiments)	Zinc	AOAC (19 th Edition) 999.11: 2012,	0.255 mg/kg to 100 mg/kg
		Copper	AOAC (19 th Edition) 999.11: 2012	0.214 mg/kg to 100 mg/kg
		Cadmium	AOAC (19 th Edition) 999.11: 2012,	0.06 mg/kg to 10 mg/kg
		Lead	AOAC (19 th Edition) 999.11: 2012	0.413 mg/kg to 100 mg/kg
11.	Tea and Tea Products	Lead	AOAC (19 th Edition) 999.11: 2012	0.413 mg/kg to 100 mg/kg

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		Cadmium	AOAC (19 th Edition) 999.11: 2012	0.06 mg/kg to 100 mg/kg
12.	Coffee ,Cocoa and Byproducts	Lead	AOAC (19 th Edition) 999.11: 2012	0.413 mg/kg to 100 mg/kg
13.	Beverages (Non Alcoholic/Carbonated Drinks/Tea and Tea Product, Coffee, Cocoa and by Product)	Lead	AOAC (19 th Edition) 999.11: 2012,	0.413 mg/kg to 100 mg/kg
		Zinc	AOAC (19 th Edition) 999.11: 2012	0.255 mg/kg to 100 mg/kg
		Copper	AOAC (19 th Edition) 999.11: 2012,	0.214 mg/kg to 100 mg/kg
		Cadmium	AOAC (19 th Edition) 999.11: 2012	0.06 mg/kg to 100 mg/kg
14.	Fruit Juices and Concentrates	Lead	AOAC (19 th Edition) 999.11: 2012	0.413 mg/kg to 100 mg/kg
15.	Mycotoxins in Food & Feed	Aflatoxins B1	ADIPL/SOP/CD /F&A/003 (Issue date. 10.10.2013)/ B-pharm/ AOAC (19 th Edition) 999.07: 2012	1 µg/kg to 20 µg/kg
		Aflatoxins B2	ADIPL/SOP/CD /F&A/003 (Issue date. 10.10.2013)/ B-pharm/ AOAC (19 th Edition) 999.07: 2012	1 µg/kg to 20 µg/kg
		Aflatoxins G1	ADIPL/SOP/CD /F&A/003 (Issue date. 10.10.2013)/	1 µg/kg to 20 µg/kg

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			B-pharm/ AOAC (19 th Edition) 999.07: 2012	
		Aflatoxins G2	ADIPL/SOP/CD /F&A/003 (Issue date. 10.10.2013)/ B-pharm/ AOAC (19 th Edition) 999.07: 2012	1 µg/kg to 20 µg/kg
16.	Milk and Dairy Products	Mycotoxin M1	ADIPL/SOP/CD/F&A/004 (Issue date. 10.10.2013)/ B-pharm/ AOAC (19 th Edition) 2000.08: 2012	0.05 µg/kg to 20 µg/kg
17.	Food and Agriproducts	Cholesterol	ADIPL/SOP/CD/F&A/005 (Issue date. 10.10.2013)/ AOAC (19 th Edition) 994.10: 2012	0.1 % to 50 %
		Total Fatty Acids	ADIPL/SOP/CD/F&A/006 (Issue date. 10.10.2013)/ AOAC (19 th Edition) 9622: 2012	0.1 % to 100 %
18.	Coffee	Caffeine	ADIPL/SOP/CD/F&A/007 (Issue date. 10.10.2013) AOAC (19 th Edition): 2012,	1 mg/kg to 500 mg/kg
19.	Fruits & Vegetables	Rotting	DGHS Lab Manual 3,2005	Qualitative (Present/Absent)
		Mould	DGHS Lab Manual 3,2005	Qualitative (Present/Absent)
		Added Wax Coating	DGHS Lab Manual 3,2005	Qualitative (Present/Absent)
		Rodent Contamination	DGHS Lab Manual 3,2005	Qualitative (Present/Absent)

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		Pesticides		
	Aldrin		ADIPL/SOP/F&A/001/GCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	Dieldrin		ADIPL/SOP/F&A/001/GCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	Alpha -BHC		ADIPL/SOP/F&A/001/GCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	Gamma -BHC		ADIPL/SOP/F&A/001/GCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	Delta -BHC		ADIPL/SOP/F&A/001/GCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	Beta-BHC		ADIPL/SOP/F&A/001/GCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	Alpha Endosulfan		ADIPL/SOP/F&A/001/GCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg

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	Beta Endosulfan		ADIPL/SOP/F&A/001/GCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	Endosulfan Sulphate		ADIPL/SOP/F&A/001/GCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	O,P - DDD		ADIPL/SOP/F&A/001/GCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	P,P - DDD		ADIPL/SOP/F&A/001/GCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	O,P - DDT		ADIPL/SOP/F&A/001/GCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	P,P - DDT		ADIPL/SOP/F&A/001/GCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	O,P - DDE		ADIPL/SOP/F&A/001/GCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01	0.01 mg/kg to 20 mg/kg

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			: 2012	
	P,P - DDE		ADIPL/SOP/F&A/001/GCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	Alachlor		ADIPL/SOP/F&A/001/GCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	Atrazine		ADIPL/SOP/F&A/001/GCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	Butachlor		ADIPL/SOP/F&A/001/GCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	Phorate		ADIPL/SOP/F&A/008/LCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	Chlorpyrifos		ADIPL/SOP/F&A/001/GCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	Chloropyrifos Methyl		ADIPL/SOP/F&A/001/GCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Methyl Parathion		ADIPL/SOP/F&A/001/GCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	Methyl Paraoxon		ADIPL/SOP/F&A/001/LCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	Malaaxon		ADIPL/SOP/F&A/008/LCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	Malathion		ADIPL/SOP/F&A/008/LCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	Phorate Sulfone		ADIPL/SOP/F&A/008/LCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	Phorate Sulfoxide		ADIPL/SOP/F&A/008/LCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	Hexachlorobenzene		ADIPL/SOP/F&A/001/GCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Isoproturon		ADIPL/SOP/F&A/008/LCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	2,4- D		ADIPL/SOP/F&A/008/LCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	Ethion		ADIPL/SOP/F&A/001/GCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	Dichlorvos		ADIPL/SOP/F&A/008/LCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	Chlordane		ADIPL/SOP/F&A/001/GCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	Paraquat Dichloride		ADIPL/SOP/F&A/008/LCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
	Thiometon		ADIPL/SOP/F&A/008/LCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Carbendazim	ADIPL/SOP/F&A/008/LCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
		Benomyl	ADIPL/SOP/F&A/008/LCMSMS (Issue date. 12.10.2012) AOAC (19 th Edition) 2007.01 : 2012	0.01 mg/kg to 20 mg/kg
		Carbofuran	ADIPL/SOP/F&A/008/LCMSMS AOAC (19 th Edition) 2007.01 : 2012 (Issue date. 12.10.2012)	0.01 mg/kg to 20 mg/kg
		Deltamethrin	ADIPL/SOP/F&A/008/GCMSMS AOAC (19 th Edition) 2007.01 : 2012 (Issue date. 12.10.2012)	0.01 mg/kg to 20 mg/kg

V. INDUSTRIAL AND FINE CHEMICALS

Aluminium Sulphate (Ferric)

Water Insoluble Matter	IS 299: 1989 (RA 1999)	0.1 % to 5 %
Iron as Fe	IS 299: 1989 (RA 1999)	0.2 % to 3 %
pH of 5 % Aqueous Solution	IS 299: 1989 (RA 1999)	2.0 to 14.0
Water Soluble Aluminium Compounds as Al ₂ O ₃	IS 299: 1989 (RA 1999)	0 to 18 %

Aluminium Sulphate (Non – Ferric)

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Water Insoluble Matter	IS 260: 2001(RA 2007)	0.01 % to 0.1 %
		Iron as Fe	IS 260: 2001 (RA 2007)	0.01 % to 1 %
		Water Soluble Aluminium Compounds as Al ₂ O ₃	IS 260: 2001 (RA 2007)	14.0 % to 18.0 %
		pH of 5 % Aqueous Solution	IS 260: 2001 (RA 2007)	2.0 to 14
		Bleaching Powder		
		Available Chlorine as CaOCl	IS 1065: 1989 (RA 2010) Amd. 1	25 % to 70 %
		Moisture	IS 1065: 1989 (RA 2010) Amd. 1	0.10 % to 1 %
		Caustic Soda		
		Assay (Solid)	IS 252:1991 (RA 2010) Amd. 1	90 % to 98 %
		Assay(Liquid)	IS 252:1991 (RA 2010) Amd. 1	48 % to 60 %
		Sodium Carbonate as Na ₂ CO ₃	IS 252:1991 (RA 2010) Amd. 1	0.5 % to 2.0 %
		Sodium Chloride		
		Assay NaCL	IS 253: 1985 (RA 2004) Amd. 1	80 % to 100 %
		Calcium as Ca	IS 253: 1985 (RA 2004) Amd. 1	0.10 % to 1 %
		Moisture @ 150 °C	IS 253: 1985 (RA 2004) Amd. 1	0.10 % to 1 %
		Iron as Fe	IS 253: 1985 (RA 2004) Amd. 1	1 ppm to 100 ppm
		Matter Insoluble in Water	IS 253: 1985 (RA 2004) Amd. 1	0.10 % to 2 %
		Magnesium as Mg	IS 253: 1985 (RA 2004) Amd. 1	0.1 % to 1 %

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		Sulfates as SO ₄	IS 253: 1985 (RA 2004) Amd. 1	0.1 % to 1.0 %

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