

Laboratory	Sigma Test & Research Centre, BA-15, Mangolpuri Industrial Area, Phase-II, New Delhi		
Accreditation Standard Discipline	ISO/IEC 17025: 2005		
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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. METALS AND ALLOYS				
1. Mild steel	Carbon		IS 228 (Part 1): 1987 (RA 2008)	0.05 % to 2.50 %
	Sulphur			0.01 % to 0.2 %
	Phosphorus		IS 228 (Part 9): 1989 (RA 2004)	0.001 % to 0.2 %
	Silicon		IS 228 (Part 3): 1987 (RA 2008)	0.05 % to 5.0 %
	Manganese			0.1 % to 10.0 %
	Carbon Equivalent		IS 228 (Part 8): 1989 (RA 2004)	0.1 to 0.7
			IS 228 (Part 2): 1987 By Calculation	
2. Stainless Steel	Carbon		IS 228 (Part 1): 1987 (RA 2008)	0.01 % to 2.0 %
	Sulphur			0.01 % to 0.2 %
	Phosphorus		IS 228 (Part 9): 1989 (RA 2004)	0.001 % to 0.2 %
	Silicon		IS 228 (Part 3): 1987 (RA 2008)	0.05 % to 5.0 %
	Manganese			0.1 % to 10.0 %
	Nickel		IS 228 (Part 8): 1989 (RA 2004)	0.1 % to 25.0 %
	Chromium		IS 228 (Part 2): 1987	0.1 % to 30.0 %

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		Molybdenum	IS 228 (Part 5): 1987 IS 228 (Part 6): 1987 IS 228 (Part 7): 1990	1.0 % to 4.0 %
3.	Mild steel & Stainless Steel	Copper	IS 228 (Part 15): 1992/AAS IS 228 (Part 19): 1998 STRC/STP/BC11	0.05 % to 5 %/ 0.001 % to 0.5 %
		Nitrogen	Issue No/Date.1/22.09.2014	0.01 % to 0.5 %
		Titanium		0.1 % to 0.5 %
		Vanadium		0.05 % to 0.25 %
		Tin		0.1 % to 0.5 %
		Arsenic		0.1 % to 0.5 %
		Boron		0.5 % to 2.5 %
		Nickel		0.1 % to 0.5 %
		Chromium		0.1 % to 0.5 %
		Molybdenum		0.1 % to 0.5 %
4.	GI Sheet/	Anodic Coating	IS 5523: 1993 Clause. 2.3	1 micron to

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	Pipe/Aluminium Product		(Stripping)	2000 micron
		Mass of Zinc Coating	IS 6745: 1972 Clause. 3.1.1 (B) (Single spot test)	5 g/m ² to 1000 g/m ²
II. BUILDING MATERIALS				
1.	Fly ash	Loss on Ignition	IS 1727: 1967 (RA 2004)	0.1 % to 20.0 %
		Silica	IS 1727: 1967 (RA 2004)	10.0 % to 70.0 %
	Fly ash	Combined Ferric oxide and Alumina	IS 1727: 1967 (RA 2004)	1 % to 50.0 %
		Calcium Oxide	IS 1727: 1967 (RA 2004)	0.5 % to 20.0 %
		Magnesia	IS 1727: 1967 (RA 2004)	0.1 % to 10.0 %
		Sulphuric Anhydride	IS 1727: 1967 (RA 2004)	0.01 % to 10.0 %
		Available Alkalis (as Na ₂ O)	IS 3812 (Part 1 & 2): 2013	0.01 % to 10.0 %
		Chloride	IS 4032: 1985	0.01 % to 0.5 %
2.	Cement (OPC/PPC/ PSC/WPC)	Insoluble Residue	IS 4032: 1985 (RA 2005) Clause 4.10	0.1 % to 40 %
		Iron as Fe ₂ O ₃	IS 4032: 1985 (RA 2005) Clause 4.5.2	0.1 % to 8.0 %

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		Alumina as Al ₂ O ₃	IS 4032: 1985 (RA 2005) Clause 4.6.1	1.0 % to 10 %
		Sulphuric anhydride (as SO ₃)	IS 4032: 1985 (RA 2005) Clause 4.9	0.5 % to 5.0 %
		Calcium Oxide (CaO)	IS 4032: 85 (RA 2005) Clause 4.7.2	35 % to 70 %
		Magnesia (as MgO)	IS 4032: 1985 (RA 2005) Clause 4.8.2	0.5 % to 10 %
	Cement (OPC/PPC/PSC/WPC)	Magnesia (as MgO) (for PPC)	IS 4032: 1985 Clause 7.2.1	0.1 % to 10.0 %
		Sulphur as Sulphide (S) (for PSC)	IS 4032: 1985 Clause 4.9	0.01 % to 5.0 %
		Combined Oxide (as R ₂ O ₃)	IS 4032: 85(RA 2005)	1.0 % to 20.0 %
		Loss on ignition (LOI)	IS 4032: 85 (RA 2005)	0.5 % to 20 %
		Free Lime	IS 4032: 85 (RA 2005)	0.01 % to 5 %
		Alkali Content as Sodium Oxide (Na ₂ O)	IS 4032: 85 (RA 2005)	0.01 % to 2 %
		Chloride content	IS 4032: 85 (RA 2005)	0.01 % to 2 %
		Silica	IS 4032: 1985 (RA 2005)	10 % to 40 %

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3.	Soil	Total soluble solids	IS 2720 (Part 21): 1977 (RA 2006)	(10 Micro mho to 5000 Micro mho)/cm
		Acidity	IS 3025 (Part 22): 1986	0.01 % to 20 %
		Alkalinity	IS 3025 (Part 23): 1986	0.01 % to 20 %
		Carbonates	IS 2720 (Part 23): 1976 (RA 2006)	0.01 % to 20 %
		Silica	IS 2720 (Part 25): 1982	40 % to 90.0 %
		Nitrogen	IS 10158: 1982 (RA 2003)	0.1 % to 5.0 %
		Phosphorus	IS 3025 (Part 31): 1988	0.1 % to 5.0 %
	Soil	Potassium Sodium	IS 3025 (Part 45): 1993 IS 3025 (Part 45): 1993	0.01 % to 10.0 % 0.01 % to 10 %
		pH	IS 2720 (Part 26): 1987 (RA 2002)	2 to 12
		Water soluble sulphates	IS 2720 (Part 27): 1977 (RA 2001)	0.01 % to 5 %
		Water soluble chlorides	IS 3025 (Part 32): 1988	0.01 % to 5 %
		Organic Matter	IS 2720 (Part 22): 1977 (RA 2001)	0.02 % to 10 %
4.	Admixtures	pH	IS 9103: 1999 (RA 2008)	4 to 10

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5.	Gypsum Building plaster	Relative Density	IS 9103: 1999 (RA 2008)	0.7 to 1.5
		Dry Material Content	IS 9103: 1999 (RA 2008)	15 % to 50 %
		Ash Content	IS 9103: 19 99 (RA 2008)	1 % to 25.0 %
		Chloride Ion content	IS 6925: 1973 (RA 2008)	0.01 % to 1 %
		Sulphur Trioxide (as SO ₃)	IS 1288: 1982 (RA 2006)	15 % to 50 %
		Calcium Oxide (as CaO)	IS 1288: 1982 (RA 2006) (Clause 10.1 KMnO ₄)	10 % to 35 %
	Gypsum Building plaster	Soluble Magnesium Salt (as MgO)	IS 2547 (Part 1): 1976 (RA 2002) Appendix A IS 1288: 1982 (RA 1999)	0.01 % to 0.5 %
		Soluble Sodium Salt (as Na ₂ O)	IS 2547 (Part 1):1976 Appendix A IS 4032: 1985 (RA 2005)	0.01 % to 2 %
		Loss on Ignition	IS 2547: 1976 (Part 1) Appendix B	1 % to 20.0 %
		Free Lime	IS 2547 (Part 1): 1976 Appendix C	0.1 % to 5.0%

III. FOOD AND AGRICULTURAL PRODUCTS

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1.	Animal Feeds and Feeding Stuffs	Moisture	IS 7874 (Part 1): 1975 (RA 2004)	(0.5 to 30) g/100g
		Total ash	IS 7874 (Part 1): 1975 (RA 2004)	(0.1 to 20) g/100g
		Acid insoluble ash	IS 7874 (Part 1): 1975 (RA 2004)	(0.1 to 15) g/100g
		Crude Protein	IS 7874 (Part 1): 1975 (RA 2004)	(0.5 to 90) g/100g
		Crude Fat	IS 7874 (Part 1): 1975 (RA 2004)	(0.1 to 15) g/100g
		Crude Fibre	IS 7874 (Part 1): 1975 (RA 2004)	(1 to 25) g/100g
		Phosphorus	AOAC (19 th Edition)965.17	(0.05 to 5) g/100g
		Salt as NaCl	AOAC (19 th Edition)960.29	(0.1 to 10) g/100g
		Sodium	AOAC (19 th Edition)966.16	(1.0 to 5000) mg/100g
		Potassium	AOAC (19 th Edition)965.30	(1.0 to 5000) mg/100g
2.	Oil & Fats Ghee, Butter,	Moisture and volatile Matter	AOCS Ca 2c-25 (6 th Edition): 2009	(0.01 to 1) g/100g

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	Margarine and Vanaspati	Acid value	AOCS Cd 3d-63 (6 th Edition): 2009	0.1 to 10
		Unsaponifiable matter	AOCS Ca 6a-40 (6 th Edition): 2009	(0.01 to 10) g/100g
		Saponification value	AOCS Cd 3-25 (6 th Edition): 2009	150 to 300
		Specific gravity	AOCS Cc 10b-25 (6 th Edition): 2009	0.85 to 0.95
		Iodine value	AOCS Cd 1-25 (6 th Edition): 2009	7 to 200
		Refractive Index	AOCS Cc 7-25 (6 th Edition): 2009	1.4300 to 1.4700
		Flash point	AOAC Cc 9c-95 (6 th Edition): 2009	1 ⁰ C to 390 ⁰ C
		Peroxide value	AOCS Cd 8b-90 (6 th Edition): 2009	(1 to 100) meq/kg
		Melting point	AOCS Cc 1-25 (6 th Edition): 2009	15 ⁰ C to 80 ⁰ C
		Richert Missel Value	AOCS Cd 5-40 (6 th Edition): 2009	1 to 80

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		Polenske value	AOCS Cd 5-40 (6 th Edition): 2009	0.1 to 10
		Cholesterol	STRC/STP/F009 (Issue No./ Date:- 01/19.11.2013)	(0 to 1000) mg/100g
	Oil & Fats Ghee, Butter, Margarine and Vanaspati	Adulterations Sesame oil Cotton seed oil Rice Bran oil Linseed oil Mustard oil Adulterations Sesame oil Cotton seed oil Rice Bran oil Linseed oil Mustard oil	IS 548: 1964 (RA 2010)	Qualitative (Present/Absent)
3.	Oil seeds, Deoiled Seed & Oil Cakes)	Moisture	IS 3579: 1966 (RA 2000)	(0.01 to 25.0) g/100g
		Oil Content	IS 3579: 1966 (RA 2000)	(0.1 to 85.0) g/100g
		Damaged & Weevilled	IS 3579: 1966 (RA 2000)	(0.02 to 15.0)

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4.	Food Grains (Cereal & Pulses)	Seeds		g/100g
		Slightly Damaged Seeds	IS 3579: 1966 (RA 2000)	(0.02 to 15.0) g/100g
		Shrivelled & Immature Seeds	IS 3579: 1966 (RA 2000)	(0.02 to 15.0) g/100g
		Impurities	IS 3579: 1966 (RA 2000)	(0.01 to 15.0) g/100g
		Acid value of extracted fat	IS 3579: 1966 (RA 2000)	0.1 to 10.0
		Moisture	IS 4333 (Part 2): 2002 (RA 2012)	(0.1 to 20.0) g/100g
		Refraction	IS 4333 (Part 1): 1996 (RA 2012)	(0.1 to 100) g/100g
		Uric acid	IS 4333 (Part 5): 1970 (RA 2005)	1 mg/kg to 100 mg/kg
	Food Grains (Cereal & Pulses)	Mass of 1000 grains	IS 4333 (Part 4): 2002 (RA 2012)	200 g to 2000 g
		Sodium	AOAC (19 th Edition)966.16	(1.0 to 5000) mg/100g
		Potassium	AOAC (19 th Edition)965.30	(1.0 to 5000) mg/100g
5.	Wheat Atta	Moisture	IS 1155: 1968 (RA 2005)	(0.1 to 20) g/100g

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		Total ash	IS 1155: 1968 (RA 2005)	(0.05 to 10) g/100g
		Acid insoluble ash	IS 1155: 1968 (RA 2005)	(0.01 to 5) g/100g
		Gluten (on dry basis)	IS 1155: 1968 (RA 2005)	(1.0 to 30) g/100g
		Granularity	IS 1155: 1968 (RA 2005)	Qualitative
		Crude fibre	IS 1155: 1968 (RA 2005)	(0.2 to 5) g/100g
		Alcoholic acidity	IS 1155: 1968 (RA 2005)	(0.01 to 1.0) g/100g
		Sedimentation Index (Zeleny test)	IS 13864: 1993 (RA 2010)	5.0 ml to 74 ml
6.	Maida	Moisture	IS 1009: 1979 (RA 2005)	(0.1 to 20) g/100g
		Total ash	IS 1009: 1979 (RA 2005)	(0.05 to 10) g/100g
		Acid insoluble ash	IS 1009: 1979 (RA 2005)	(0.01 to 5) g/100g
		Gluten	IS 1009: 1979 (RA 2005)	(1.0 to 35) g/100g
		Granularity	IS 1009: 1979 (RA 2005)	Qualitative
		Alcoholic acidity	IS 1009: 1979 (RA 2005)	(0.01 to 2.0) g/100g
7.	Suji/Rava	Moisture	IS 1010: 1968 (RA 2005)	(0.1 to 20) g/100g
		Total ash	IS 1010: 1968 (RA 2005)	(0.05 to 10)

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		Acid insoluble ash	IS 1010: 1968 (RA 2005)	g/100g (0.01 to 5) g/100g
		Alcoholic acidity	IS 1010: 1968 (RA 2005)	(0.01 to 2.0) g/100g
		Gluten	IS 1010: 1968 (RA 2005)	(0.5 to 15) g/100g
8.	Tea (Green Tea, Tea Leaves & Ready Tea bags)	Moisture	IS 13859: 1993 (RA 1998)	(0.1 to 20) g/100g
		Total ash	IS 13854: 1994 (RA 2004)	(1.0 to 20) g/100g
		Acid insoluble ash	IS 13857: 1993 (RA 2004)	(0.1 to 10) g/100g
		Water extract	IS 13862: 1999 (RA 2004)	(0.5 to 50) g/100g
		Water insoluble ash	IS 13855: 1993 (RA 2004)	(1.0 to 30) g/100g
		Water soluble ash	IS 13855: 1993 (RA 2004)	(1.0 to 10) g/100g
		Alkalinity of water - soluble ash (as K ₂ O)	IS 13856: 1993 (RA 2004)	(0.5 to 10.0) g/100g
		Crude fibre	IS 10226 (Part 1): 1982 (RA 2005)	(0.5 to 50) g/100g
9.	Edible Starches Arrowroot & Soup Powder	Moisture	IS 4706: 1978 (RA 2010)	(1 to 80) g/100g
		Total Ash	IS 4706: 1978 (RA 2010)	(0.1 to 50.0) g/100g
		Acid Insoluble ash	IS 4706: 1978 (RA 2010)	(0.01 to 50.0) g/100g

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	Edible Starches Arrowroot & Soup Powder	Sulphated ash	IS 4706: 1978 (RA 2010)	(0.1 to 50.0) g/100g
		Crude Protein	IS 4706: 1978 (RA 2010)	(0.3 to 70.0) g/100g
		Starch	IS 4706: 1978 (RA 2010)	(0.1 to 90.0) g/100g
		Crude Fibre	IS 4706: 1978 (RA 2010)	(0.1 to 50.0) g/100g
		Sulphur dioxide	AOAC (19 th Edition) 990.28	(10 to 500) mg /kg
		Free acidity	IS 4706: 1978 (RA 2010)	(0.1 to 20.0) g/100g
		Alcoholic acidity	IS 4706: 1978 (RA 2010)	(0.01 to 1.0) g/100g
		pH	IS 4706: 1978 (RA 2010)	1.0 to 14.0
		Hydrocyanic acid	IS 4706: 1978 (RA 2010)	Qualitative (Absent/Present)
		Viscosity	IS 4706 (Part 1): 1978 (RA 2010)	200 cps to 100000 cps
10	Nuts, Pistachio, Almonds, Dates, Ground nut, (Raisins, Cashew Nuts, Apricot & Wall Nuts)	Moisture	IS 4684: 1975 (RA 2005)	(0.5 to 50.0) g/100g
		Total Ash	IS 4684: 1975 (RA 2005)	(0.5 to 10.0) g/100g
		Acid Insoluble Ash	IS 4684: 1975 (RA 2005)	(0.05 to 10.0) g/100g
		Fat	IS 4684: 1975 (RA 2005)	(0.5 to 80.0) g/100g
		Crude fibre	IS 4684: 1975 (RA 2005)	(0.5 to 50.0) g/100g

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		Protein	IS 4684: 1975 (RA 2005)	(0.5 to 50.0) g/100g
		Acid value of extracted fat	IS 4684: 1975 (RA 2005)	(0.1 to 10.0) g/100g
11	Fruits and Vegetables (Canned vegetables, Dried / Dehydrated vegetables, Frozen vegetables)	Moisture	AOAC (19 th Edition)934.06	(0.1 to 95) g/100g
.		Total Solid	AOAC (19 th Edition)920.151	(0.5 to 20) g/100g
		Ash	AOAC (19 th Edition)940.26	(0.1 to 10) g/100g
		Starch	IS 4706 (Part 2): 1978 (RA 2005)	(1 to 99) g/100g
		Total soluble solids	AOAC (19 th Edition)932.12/ (19 th Edition) 983.17	1 ° to 85 ° Brix
		Protein	AOAC (19 th Edition)920.152	(0.1 to 50) g/100g
		Reducing sugar	IS 2860: 1964 (RA 2008)	(1.0 to 70) g/100g
		Acidity (as citric acid)	AOAC (19 th Edition)942.15	(0.1 to 10) g/100g
		Sulphur dioxide	AOAC (19 th Edition)990.28	10 mg/kg to 1000 mg/kg
		Vitamin C	AOAC (19 th Edition)967.21	(1 to 500) mg/100g
12	Raw Milk	Total Solids	IS 1479 (Part 2): 1961 (RA 2009)	(5 to 20) g/100g
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		Ash	IS 1479 (Part 2): 1961 (RA 2009)	(0.01 to 2) g/100g
		Protein	IS 7219 : 1973 (RA 2005)	(0.5 to 5) g/100g
		Fat	IS 1479 (Part 2): 1961 (RA 2009)	(0.1 to 10) g/100g
		Solid Non Fat	IS 1479 (Part I): 1960 (RA 2003)	(7 to 12.5) g/100g
		Titration Acidity	IS 1479 (Part I): 1966 (RA 2003)	(0.05 g to 2.0 g)/100g
	Raw Milk	Lactose	IS 1479 (Part 2): 1961 (RA 2009)	(1 to 15) g/100g
		Adulteration Cane Sugar Starch Urea Neutralizer Hydrogen Peroxide Formalin	DGHS Manual 2005	Qualitative (Absent/Present)
13	Dried Milk	Moisture	AOAC (19 th Edition)927.05	(0.1 to 10) g/100g
		Total Solid	IS 1165: 2002 (RA 2009)	(20 to 100) g/100g
		Ash	IS 1165: 2002 (RA 2009)	(0.05 to 10) g/100g
		Fat	IS 11721: 2005 (RA 2010)	(0.1 to 25) g/100g

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		Protein	IS 7219: 1973 (RA 2005)	(10 to 50) g/100g
		Titration Acidity	IS 1165: 2002 (RA 2009)	(0.1 to 5) g/100g
		Insolubility Index	IS 12759: 1989 (RA 2009)	0.1 ml to 1 ml
		Vitamin A	STRC/STP/F012 (Issue No./ Date:- 01/30.12.2013)	(50 to 1000) µg/100g
		Vitamin E	STRC/STP/F013 (Issue No./ Date:- 01/14.10.2013)	(0.5 to 50) mg/100g
14	Sweetened Condensed Milk	Total Solids	IS 1166: 1986 (RA 2009)	(15 to 85) g/100g
		Total Milk Solid	IS 1166: 1986 (RA 2009)	(20 to 40) g/100g
		Fat	IS 1166: 1986 (RA 2009)	(0.1 to 15) g/100g
		Milk Solid Not Fat	IS 1166: 1986 (RA 2009)	(15 to 30) g/100g
		Titration Acidity	IS 1166:1986 (RA 2009)	(0.1 to 5) g/100g
		Sucrose	IS 1166: 1986 (RA 2009)	(10 to 60) g/100g
		Accelerated Storage test	IS 1166: 1986 (RA 2009)	Qualitative (Pass/Fail)

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15	Paneer /Cheese (includes Natural & Processed Cheese)	Moisture	IS 10484: 1983 (RA 2010)	(1 to 80) g/100g
		Ash	IS 2785: 1979 (RA 2010)	(1 to 10) g/100g
		Fat	IS 2785: 1979 (RA 2010)	(1 to 70) g/100g
		Protein	IS 7219: 1973 (RA 2005)	(1 to 50) g/100g
		Titration acidity	IS 10484: 1983 (RA 2010)	(0.1 g to 5 g)/100g
		Salt	AOAC (19 th Edition) 960.29	(0.1 g to 10 g)/100g
16	Ice cream	Moisture	IS 2802: 1964 (RA 2009)	(10 to 80) g/100g
		Total solids	IS 2802: 1964 (RA 2009)	(25 to 65) g/100g
		Sucrose	IS 2802: 1964 (RA 2009)	(5 to 60) g/100g
		Milk Fat	IS 2802: 1964 (RA 2009)	(0.5 to 25) g/100g
17	Liquid glucose	Titration Acidity	IS 2802: 1964 (RA 2009)	(0.1 to 5) g/100g
		Dextrose Equivalent	IS 873: 1974 (RA 2010)	(20 to 60) g/100g
		Total solids	IS 873: 1974 (RA 2010)	(1.0 to 100) g/100g
		pH	IS 873: 1974 (RA 2010)	1.0 to 14
		Ash	IS 873: 1974 (RA 2010)	(0.02 to 5.0) g/100g
18	Meat	Sulphur Dioxide	AOAC (19 th Edition) 990.28	(10 to 500) mg /kg
		Moisture	AOAC (19 th Edition) 950.46	(1 to 85) g/100g

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19	Spices and Condiments (Whole & Powdered)	Ash	AOAC (19 th Edition) 920.153	(0.5 to 5.0) g/100g
		Total Fat	AOAC (19 th Edition) 922.06	(1 to 20) g/100g
		Protein	IS 7219: 1973 (RA 2005)	(1 to 80) g/100g
		Total Phosphorus	AOAC (19 th Edition) 965.17	(0.01 to 3.0) g/100g
		Moisture	IS 1797: 1985 (RA 2003)	(1 to 30) g/100g
		Total ash	IS 1797: 1985 (RA 2003)	(1 to 30) g/100g
		Acid insoluble ash	IS 1797: 1985 (RA 2003)	(0.1 to 20) g/100g
		Non volatile ether extract	IS 1797: 1985 (RA 2003)	(0.5 to 40) g/100g
		Volatile oil	IS 1797: 1985 (RA 2003)	(0.1 to 20) g/100g
		Cold water soluble extract	IS 1797:1985 (RA 2003)	(0.05 to 90) g/100g
20	Turmeric powder	Salt (as NaCl)	AOAC 960.29, 19th Edn	(0.05 to 90) g/100g
		Crude Fibre	IS 1797:1985 (RA 2003)	(0.1 to 30) g/100g
		Curcumin content	IS 10925: 1984 (RA 2007)	(1 to 95) g/100g
		Starch	IS 4706 (Part 2): 1978 (RA 2005)	(40 to 60) g/100g
		Presence of chromates	IS 3576:1994 (RA 2003)	Qualitative

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				(Present/Absent)
21	Bakery products	Moisture	IS 1485: 1993 (RA 2005)	(0.1 to 10) g/100g
	Baking Powder,	Ash	IS 1485: 1993 (RA 2005)	(0.1 to 20) g/100g
	Burs, Cake & Pastry,	Acid insoluble ash	IS 1485: 1993 (RA 2005)	(0.01 to 5) g/100g
	Popcorns, Chips & Wafers, Rusks, Pizza base & Nans	Fat	AOAC (19 th Edition)920.85	(1 to 60) g/100g
		Protein	IS 7219: 1973 (RA 2005)	(1 to 40) g/100g
		Carbohydrate	AOAC (19 th Edition)986.25	(10 to 90) g/100g
		Energy	STRC/STP/F073 (Issue No./ Date:- 01/22.09.2014)	(50 to 1000) kcal/100g
		Crude Fibre	IS 10226 (Part 1): 1982	(0.5 to 10) g/100g
		Total Sugar	AOAC (19 th Edition) 923.09	(0.5 to 20) g/100g
		Salt	AOAC (19 th Edition) 960.29	(0.1 to 1.0) g/100g
		Phosphorus	AOAC (19 th Edition) 965.17	(50 to 500) mg/100g
		Dietary Fibre	AOAC (19 th Edition) 985.29	(1 to 20) g/100g
		Cholesterol	STRC/STP/F014 (Issue No./ Date:- 01/22.09.2014)	(1 to 1000) mg/100g
22	Biscuit	Moisture	IS 1011: 2002 (RA 2009)	(0.1 to 10.0)

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.		Acid Insoluble Ash	IS 1011: 2002 (RA 2009)	g/100g (0.01 to 2.0)
		Fat	IS 1011: 2002 (RA 2009)	g/100g (0.1 to 50.0)
		Protein	AOAC (19 th Edition) 920.87	g/100g (0.2 to 25.0)
		Acidity of Extracted Fat	IS 1011: 2002 (RA 2009)	g/100g (0.1 to 2.0)
		Texture	IS 1011: 2002 (RA 2009)	g/100g Qualitative (Uniform/ Deform)
		Total Sugar	IS 4079: 1967 (RA 2000)	(0.5 to 50.0) g/100g
		Sodium	AOAC (19 th Edition) 966.16	(1.0 to 5000) mg/100g
		Potassium	AOAC (19 th Edition) 965.30	(1.0 to 5000) mg/100g
23	Confectionery (Chewing gum, Bubble gum, Hard-boiled Confectionary, Gum Base, Toffees)	Moisture	IS 6287: 1985 (RA 2005)	mg/100g (0.1 to 25) g/100g
.		Acid Insoluble ash	IS 6287: 1985 (RA 2005)	(0.01 to 0.5) g/100g
		Sulphated ash	IS 6287: 1985 (RA 2005)	(0.01 to 5.0) g/100g
		Reducing sugar	IS 6287: 1985 (RA 2005)	(1 to 30) g/100g
		Sucrose	IS 6287: 1985 (RA 2005)	(1 to 80) g/100g
		Fat	IS 6287: 1985 (RA 2005)	(0.5 to 10) g/100g
		Protein	IS 6287: 1985 (RA 2005)	(0.5 to 20) g/100g

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	Confectionery (Chewing gum, Bubble gum, Hard-boiled Confectionary, Gum Base, Toffees)	Gum Content	IS 6747: 1981 (RA 2005)	(5 to 30) g/100g
		Food Grade Color	DGHS Manual 2005	Qualitative (Absent/Present)
		Titanium Dioxide	AOAC 973.36, 19th Edn	(10 to 10000) mg/kg
24	Gaur Gum	Moisture	IS 3988: 1981 (RA 2001)	(0.1 to 15.0) g/100g
		Ash	IS 3988: 1981 (RA 2001)	(0.1 to 5.0) g/100g
		Protein	IS 3988: 1981 (RA 2001)	(0.2 to 5.0) g/100g
		Residue insoluble in acid	IS 3988: 1981 (RA 2001)	(0.1 to 5.0) g/100g
		Gum Content	IS 3988: 1981 (RA 2001)	(70 to 95) g/100g
		pH	IS 3988: 1981 (RA 2001)	3.5 to 7.0
		Starch	IS 3988: 1981 (RA 2001)	Qualitative (Absent/Present)
		Viscosity	IS 3988: 1981 (RA 2001)	60 cps to 10000 cps
25	Honey	Moisture	IS 4941: 1994 (RA 2002) Annexure B	(0.05 to 50) g/100g
		Ash	IS 4941: 1994 (RA 2002) Annexure D	(0.005 to 5) g/100g

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		Total Reducing Sugar	IS 4941: 1994 (RA 2002) Annexure C	(50 to 85) g/100g
	Honey	Optical density at 660 nm	IS 4941: 1994 (RA 2002) Annexure H	0.100 to 0.800
		Sucrose	IS 4941: 1994 (RA 2002) Annexure C	(0.5 to 85) g/100g
		Specific gravity at 27 deg C	IS 4941: 1994 (RA 2002) Annexure A	0.85 to 1.50
		Acidity (as formic acid)	IS 4941: 1994 (RA 2002) Annexure E	(0.01 to 0.5) g/100g
		Fiehe's test	IS 4941: 1994 (RA 2002) Annexure F	Qualitative (Negative/Positive)
		Fructose-Glucose (Ratio)	IS 4941: 1994 (RA 2002) Annexure C	0.5 to 2.0
		HMF	IS 4941: 1994 (RA 2002) Annexure F	(0.1 to 80) mg/kg
26	Pickle	Acidity (as acetic acid)	IS 3501: 1966 (RA 2005)	(0.1 to 10) g/100g
		Salt as NaCl	AOAC (19 th Edition) 960.29	(0.1 to 15) g/100g
		Benzoic acid	IS 3501: 1966 (RA 2005)	(10 to 350) mg/kg
27	Ketchup	Acidity (as acetic acid)	AOAC (19 th Edition) 942.15	(0.1 to 10) g/100g

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.		Total soluble solid	AOAC (19 th Edition) 932.12/ (19 th Edition) 983.17	(1 to 99) g/100g
		pH	Food Chemicals Codex	1.0 to 14.0
28	Edible Salt	Viscosity Moisture	Food Chemicals Codex IS 253: 1985 (RA 2004)	50 cps to 5000cps (0.01 to 10) g/100g
.		Water insoluble matter	IS 253: 1985 (RA 2004)	(0.02 to 5) g/100g
		Chloride as NaCl	IS 253: 1985 (RA 2004)	(90 to 99.9) g/100g
		Matter soluble in water (other than NaCl)	IS 253: 1985 (RA 2004)	(0.1 to 2.0) g/100g
		Calcium	IS 253: 1985 (RA 2004)	(1 to 1000) mg/kg
		Magnesium	IS 253: 1985 (RA 2004)	(1 to 1000) mg/kg
		Sulphates	IS 253: 1985 (RA 2004)	(0.1 to 1) g/100g
		Alkalinity as Na ₂ CO ₃	IS 253: 1985 (RA 2004)	(0.01 to 1) g/100g
		Lead	IS 253:1985 (RA 2004)	Comparison at 0.05 mg/kg
		Iron	IS 253: 1985 (RA 2004)	Comparison at 1 mg/kg
		Arsenic	IS 253: 1985 (RA 2004)	Comparison at 0.02 mg/kg

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		Iodine	IS 253: 1985 (RA 2004)	(0.02 to 100) mg/kg
		Ferrocyanide	IS 253: 1985 (RA 2004)	Comparison at 0.5 mg/kg
29	Coffee, Cocoa Chocolates & Chicory	Moisture	IS 2791: 1992 (RA 2009)	(0.05 to 10.0) g/100g
		Ash	IS 2791: 1992 (RA 2009)	(0.05 to 8.0) g/100g
		Caffeine	IS 2791: 1992 (RA 2009)	(0.5 to 6.0) g/100g
		Solubility	IS 2791: 1992 (RA 2009)	Qualitative (Soluble/Insoluble)
30	Infant Foods	Moisture	AOAC (19 th Edition) 927.05	(0.1 to 25.0) g/100g
		Total ash	IS 14433: 2007	(0.1 to 25.0) g/100g
		Acid insoluble ash	IS 14433: 2007	(0.01 to 0.5) g/100g
		Protein	IS 7219: 1993 (RA 2005)	(1.0 to 50) g/100g
		Fat	IS 11721: 2005	(1.0 to 70) g/100g
		Insolubility Index	IS 12759: 1989 (RA 1999)	0.1ml to 2.0 ml

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31	Namkeen	Moisture	IS 15271: 2003	(1 to 10) g/100g
		Ash	IS 15271: 2003	(1 to 40) g/100g
		Acid Insoluble Ash	IS 15271: 2003	(0.1 to 5) g/100g
		Fat	IS 15271: 2003	(1 to 60) g/100g
		Protein	IS 7219 : 1973 (RA 2005)	(0.5 to 40) g/100g
		Peroxide Value	IS 15271: 2003	(0.1 to 10) meq/kg
		Acidity of extracted Fat	IS 15271: 2003	(0.1 to 5.0) g/100g
32	Tobacco Pan Masala, Catechu & Supari	Loss on heating	IS 5643: 1999 (RA 2004)	(0.5 to 50) g/100g
		Total Ash	IS 5643: 1999 (RA 2004)	(0.5 to 20) g/100g
		Acid insoluble Ash	IS 5643: 1999 (RA 2004)	(0.1 to 5) g/100g
		Total Alkaloids (Nicotine)	IS 5643: 1999 (RA 2004)	(0.1 to 10) g/100g
		Total Nitrogen	IS 5643: 1999 (RA 2004)	(0.5 to 20) g/100g
		Total Chlorides	IS 5643: 1999 (RA 2004)	(0.1 to 5) g/100g
33	Non Alcoholic beverages Fruits beverages, Ready to serve beverages,	Acidity (as citric acid)	AOAC (19 th Edition) 942.15	(0.1 to 10) g/100g
		Total Soluble Solid	AOAC (19 th Edition) 932.12	1.0 ° to 99 °Brix
		Total Sugar	AOAC (19 th Edition) 923.09	1.0 to 80 g/100g

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34	Fresh & Canned Juices & Fruits & Vegetables Juice	Sulphur Dioxide	AOAC (19 th Edition) 990.28	(10 to 500) mg/kg
		Vitamin C	AOAC (19 th Edition) 967.21	(1 to 500) mg/100g
	Nutraceuticals	Moisture	AOAC (19 th Edition) 925.10	(0.1 to 5) g/100g
		Total Ash	AOAC (19 th Edition) 923.03	(0.1 to 2) g/100g
		Fat	AOAC (19 th Edition) 922.06	(0.01 to 5) g/100g
		Protein	AOAC (19 th Edition) 920.87	(0.5 to 99.5) g/100g
		Total sugar	AOAC (19 th Edition) 975.14	(0.5 to 5) g/100g
		Vitamin A	STRC/STP/F010 (Issue No./ Date:- 01/07.01.2014)	(50 to 1000) µg/100g
	Nutraceuticals	Vitamin E	STRC/STP/F011 (Issue No./ Date:- 01/16.12.2013)	(0.5 to 50) mg/100g
35	Alcoholic beverages (Rum, Whisky, Brandy, Gin)	Residue on evaporation	IS 3752: 2005 (RA 2008)	(0.1 to 1.0) g/100g
		Volatile acidity	IS 3752: 2005 (RA 2008)	(1 to 50) g/100 L
		Esters	IS 3752: 2005 (RA 2008)	(1 to 20) g/100 L
		Higher alcohols as amyl alcohol	IS 3752: 2005 (RA 2008)	(1 to 100) g/100 L

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36	Fruits & Vegetable Products	Total Acidity	IS 3752: 2005 (RA 2008)	(1 to 160) g/100 L
		Aldehydes as acetaldehyde	IS 3752: 2005 (RA 2008)	(5 to 45) g/100 L
		Furfural	IS 3752: 2005 (RA 2008)	(0.1 to 12) g/100 L
		Ethyl Alcohol	IS 3752: 2005 (RA 2008)	(5 to 99.5) g/100g
		Sodium (Na)	STRC/STP/F008/01 Issue No/Date 1/22.09.14	1.0 mg/kg to 50,000 mg/kg
		Potassium (K)	STRC/STP/F008/01 Issue No/Date 1/22.09.14	1.0 mg/kg to 50,000 mg/kg
		Iron (Fe)	STRC/STP/F055 Issue No/Date 1/26.12.14	0.5 mg/kg to 1000 mg/kg
		Calcium (Ca)	STRC/STP/F055 Issue No/Date 1/26.12.14	1.0 mg/kg to 10,000 mg/kg
		Magnesium (Mg)	STRC/STP/F055 Issue No/Date 1/26.12.14	1.0 mg/kg to 10,000 mg/kg
		Manganese (Mn)	STRC/STP/F055 Issue No/Date 1/26.12.14	0.1 mg/kg to 1000 mg/kg
		Lead (Pb)	STRC/STP/F055 Issue No/Date 1/26.12.14	0.5 mg/kg to 500 mg/kg
		Copper (Cu)	STRC/STP/F055 Issue No/Date 1/26.12.14	0.1 mg/kg to 1000 mg/kg
	Fruits & Vegetable Products	Nickel (Ni)	STRC/STP/F055	1.0 mg/kg to

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			Issue No/Date 1/26.12.14	1000 mg/kg
		Arsenic (As)	STRC/STP/F055 Issue No/Date 1/26.12.14	0.005 mg/kg to 100 mg/kg
		Tin (Sn)	STRC/STP/F055 Issue No/Date 1/26.12.14	15.0 mg/kg to 1000 mg/kg
		Zinc (Zn)	STRC/STP/F055 Issue No/Date 1/26.12.14	0.1 mg/kg to 100 mg/kg
		Cadmium (Cd)	STRC/STP/F055 Issue No/Date 1/26.12.14	0.1 mg/kg to 100 mg/kg
		Chromium (Cr)	STRC/STP/F055 Issue No/Date 1/26.12.14	1.0 mg/kg to 1000 mg/kg
		Mercury (Hg)	STRC/STP/F055 Issue No/Date 1/26.12.14	0.01 mg/kg to 50 mg/kg
37	Pulses, Grains & Cereals	Sodium (Na)	STRC/STP/F008/01 Issue No/Date 1/22.09.14	1.0 mg/kg to 50,000 mg/kg
		Potassium (K)	STRC/STP/F008/01 Issue No/Date 1/22.09.14	1.0 mg/kg to 50,000 mg/kg
		Iron (Fe)	STRC/STP/F054 Issue No/Date 1/26.12.14	0.5 mg/kg to 1000 mg/kg

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		Calcium (Ca)	STRC/STP/F054 Issue No/Date 1/26.12.14	1.0 mg/kg to 10,000 mg/kg
		Magnesium (Mg)	STRC/STP/F054 Issue No/Date 1/26.12.14	1.0 mg/kg to 10,000 mg/kg
		Manganese (Mn)	STRC/STP/F054 Issue No/Date 1/26.12.14	0.1 mg/kg to 1000 mg/kg
		Lead (Pb)	STRC/STP/F054 Issue No/Date 1/26.12.14	0.5 mg/kg to 500 mg/kg
		Copper (Cu)	STRC/STP/F054 Issue No/Date 1/26.12.14	0.1 mg/kg to 1000 mg/kg
		Nickel (Ni)	STRC/STP/F054 Issue No/Date 1/26.12.14	1.0 mg/kg to 1000 mg/kg
		Arsenic (As)	STRC/STP/F054 Issue No/Date 1/26.12.14	0.005 mg/kg to 100 mg/kg
		Tin (Sn)	STRC/STP/F054 Issue No/Date 1/26.12.14	15.0 mg/kg to 1000 mg/kg
	Pulses, Grains & Cereals	Zinc (Zn)	STRC/STP/F054 Issue No/Date 1/26.12.14	0.1 mg/kg to 100 mg/kg
		Cadmium (Cd)	STRC/STP/F054 Issue No/Date 1/26.12.14	0.1 mg/kg to 100 mg/kg

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		Chromium (Cr)	STRC/STP/F054 Issue No/Date 1/26.12.14	1.0 mg/kg to 1000 mg/kg
		Mercury (Hg)	STRC/STP/F054 Issue No/Date 1/26.12.14	0.01 mg/kg to 50 mg/kg
38	Fruits and vegetables (fresh & dehydrated)	Atrazine	STRC/STP/F/039 (Issue No./ Date:- 1/22.09.2014)	0.005 mg to 5 mg/kg
		Phorate sulfoxide		
		Phorate sulfone		
		Phorate		
		Permethrin II		
		Permethrin I		
		Methyl Parathion		
		Parathion		
		Myclobutanil		
		Malathion		
		Hexaconazol		
		Heptachlor-exo epoxide		
		Heptachlor		
		Fenitrothion		
		Ethion		
		Endosulfan sulphate		
		EndosulfanI-alpha		
		Aldirin		
		Dieldrin		
		DDT-pp		
		DDT-op		
		DDE-pp		
		DDE-op	STRC/STP/F/039 (Issue No./ Date:- 1/22.09.2014)	0.005 mg to 5 mg/kg
	Fruits and vegetables (fresh &	DDD-op		

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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
	dehydrated)	DDD-pp BHC Alpha BHC Beta BHC Gamma BHC Delta Cypermethrin II Cypermethrin III Cypermethrin IV Chlordane CIS Chlordane Trans Chlorpyrifos		
39	Food Grains (whole and grained)	Atrazine Phorate sulfoxide Phorate Phorate Sulfone Permethrin II Permethrin I Methyl Parathion Parathion Myclobutanil Malathion Hexaconazol Heptachlor-exo epoxide Heptachlor Fenitrothion Ethion Endosulfan sulphate Endosulfanl-alpha Aldirin Dieldrin	STRC/STP/F/051 (Issue No./ Date:- 1/22.09.2014)	0.005 mg to 5 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
	Food Grains (whole and grained)	DDT-pp DDT-op DDE-pp DDE-op DDD-op DDD-pp BHC Alpha BHC Beta BHC Gamma BHC Delta Cypermethrin II Cypermethrin III Cypermethrin IV Chlordane CIS Chlordane Trans Chlorpyrifos	STRC/STP/F/051 (Issue No./ Date:- 1/22.09.2014)	0.005 mg to 5 mg/kg
40	Nuts	Atrazine Alachor Chlorobenzlate Butachlor Chlorfenvinphos Myclobutanil Malathion Heptachlor-exo epoxide Heptachlor Ethion Endosulfan sulphate EndosulfanI-alpha EndosulfanII-Beta	STRC/STP/F/038 (Issue No./ Date:- 1/22.09.2014)	0.005 mg to 5 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
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Nuts	Aldrin Dieldrin DDT-pp DDT-op DDE-pp DDE-op DDD-op DDD-pp BHC Alpha BHC Beta BHC Gamma BHC Delta Chlorpyrifos	STRC/STP/F/038 (Issue No./ Date:- 1/22.09.2014)	0.005 mg to 5 mg/kg
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IV. WATER

1. Packaged Drinking water/ Packaged Natural Mineral water/ Borewell Water/ Surface Water	Pesticide Residue		
	Alpha HCH	USEPA 508: 1995 AOAC 990.06: 2012	0.01 µg/l to 500 µg/l
	Beta HCH	USEPA 508: 1995 AOAC 990.06: 2012	0.01 µg/l to 500 µg/l
	Gamma HCH (Lindane)	USEPA 508: 1995 AOAC 990.06: 2012	0.01 µg/l to 500 µg/l
	Delta HCH	USEPA 508: 1995 AOAC 990.06: 2012	0.01 µg/l to 500 µg/l
	2,4 D	USEPA 515.1: 1995	0.01 µg/l to 500 µg/l

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	Packaged Drinking water/ Packaged Natural Mineral water/ Borewell Water/ Surface Water	2,4-DDD	USEPA 508: 1995 AOAC 990.06: 2012	0.01 µg/l to 500 µg/l
		2,4-DDE	USEPA 508: 1995 AOAC 990.06: 2012	0.01 µg/l to 500 µg/l
		2,4-DDT	USEPA 508: 1995 AOAC 990.06: 2012	0.01 µg/l to 500 µg/l
		4,4-DDD	USEPA 508: 1995 AOAC 990.06: 2012	0.01 µg/l to 500 µg/l
		4,4-DDE	USEPA 508: 1995 AOAC 990.06: 2012	0.01 µg/l to 500 µg/l
		4,4-DDT	USEPA 508: 1995 AOAC 990.06: 2012	0.01 µg/l to 500 µg/l
		Endosulfan Alpha,	USEPA 508: 1995 AOAC 990.06: 2012	0.01 µg/l to 500 µg/l
		Endosulfan Beta	USEPA 508: 1995 AOAC 990.06: 2012	0.01 µg/l to 500 µg/l
		Endosulfan Sulphate	USEPA 508: 1995 AOAC 990.06: 2012	0.01 µg/l to 500 µg/l
		Monocrotophos	USEPA 8141A: 1994	0.01 µg/l to 500 µg/l
		Ethion	USEPA 1657A: 2000	0.01 µg/l to 500 µg/l
		Chlorpyriphos	USEPA 525.2: 1995 8141A: 1994	0.01 µg/l to 500 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
		Alachlor	USEPA 525.2: 1995 , 507: 1995	0.01 µg/l to 500 µg/l
		Phorate	USEPA 8141A: 1994	0.01 µg/l to 500 µg/l
		Phorate Sulphoxide	USEPA 8141A: 1994	0.01 µg/l to 500 µg/l
		Phorate sulphone	USEPA 8141A: 1994	0.01 µg/l to 500 µg/l
	Packaged Drinking water/ Packaged Natural Mineral water/ Borewell Water/ Surface Water	Butachlor	USEPA 525.2: 1995, 8141A: 1994	0.01 µg/l to 500 µg/l
		Isoproturon	USEPA 532: 2000	0.01 µg/l to 500 µg/l
		Atrazine	USEPA 525.2: 1995, 8141A: 1994	0.01 µg/l to 500 µg/l
		Malathion	USEPA 8141A: 1994	0.01 µg/l to 500 µg/l
		Methyl parathion	USEPA 8141A: 1994 ISO 10695: 2000	0.01 µg/l to 500 µg/l
		Methyl Paraoxon	USEPA 8141A: 1994 ISO 10695: 2000	0.01 µg/l to 500 µg/l
		Malaoxon	USEPA 8141A: 1994	0.01 µg/l to 500 µg/l
		Aldrin	USEPA508: 1995 AOAC990.06: 2012	0.01 µg/l to 500 µg/l

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			USEPA 525.2: 1995	
		Dieldrin	USEPA508: 1995 AOAC990.06: 2012 USEPA 525.2: 1995	0.01 µg/l to 500 µg/l
		Polynuclear Aromatic Hydrocarbons (PAH):	APHA 6440: 2012 IS 10500: 2012	0.1 µg/l to 500 µg/l
		Flurene	APHA 6440: 2012 IS 10500: 2012	0.1 µg/l to 500 µg/l
		Anthracene	APHA 6440: 2012 IS 10500: 2012	0.1 µg/l to 500 µg/l
	Packaged Drinking water/ Packaged Natural Mineral water/ Borewell Water/ Surface Water	Fluoranthene	APHA 6440: 2012 IS 10500: 2012	0.1 µg/l to 500 µg/l
		Benz(a)anthracene	APHA 6440: 2012 IS 10500: 2012	0.1 µg/l to 500 µg/l
		Chrysen	APHA 6440: 2012 IS 10500: 2012	0.1 µg/l to 500 µg/l
		Benzo[b]fluoran thene	APHA 6440: 2012 IS 10500: 2012	0.1 µg/l to 500 µg/l
		[Benzo [a] Pyrene	APHA 6440: 2012 IS 10500: 2012	0.1 µg/l to 500 µg/l
		Pyrene	APHA 6440: 2012 IS 10500: 2012	0.1 µg/l to 500 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
		Dimethylben(a)anthracene	APHA 6440: 2012 IS 10500: 2012	0.1 µg/l to 500 µg/l
		Benzo[k]fluoranthene	APHA 6440: 2012 IS 10500: 2012	0.1 µg/l to 500 µg/l
		Perylene	APHA 6440: 2012 IS 10500: 2012	0.1 µg/l to 500 µg/l
		Indeno[1,2,3-cd]pyrene	APHA 6440: 2012 IS 10500: 2012	0.1 µg/l to 500 µg/l
		Dibenz[a,h]anthracene	APHA 6440: 2012 IS 10500: 2012	0.1 µg/l to 500 µg/l
	Packaged Drinking water/ Packaged Natural Mineral water/ Borewell Water/ Surface Water	Benzo[ghi]perylene	APHA 6440: 2012 IS 10500: 2012	0.1 µg/l to 500 µg/l
		Polychlorinated Biphenyl (PCB)s :		
		1,1'-Biphenyl, 2,2,4,4'-tetrachloro - PCB	IS 13428: 2005 Annexure M	0.01 mg/l to 0.5 mg/l
		1,1'-Biphenyl, 2',4,4'-trichloro- PCB		
		1,1'-Biphenyl, 2,2',4,5,5'-pentachloro-PCB		
		1,1'-Biphenyl, 2,2',3,4,4',5-hexachloro- PCB		

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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'-Biphenyl, 2,2',4,4', 5,5'-hexachloro-PCM		
		1,1'-Biphenyl, 2,2',3,4, 4',5,5'-heptachloro- PCB		
		1,1'-Biphenyl, 2,2',3,3',4, 4',5,5'-octachloro-PCB		
		Trihalomethanes:		
		Bromoform	APHA 6232: 2012	0.01 mg/l to 10 mg/l
		Dibromo chloromethane		
		Bromo dichloromethane		
		Chloroform		
2.	Packaged Drinking water/Packaged Natural Mineral water/ Borewell Water/ Surface Water/ Swimming Pool Water	Colour	IS 3025 (Part 4): 1983 (RA 2002) APHA (22 nd Edition) 2120 B: 2012	1 to 100 Hazen Unit
		Odour	IS 3025 (Part 5): 1983 (RA 2002) APHA (22 nd Edition) 2150 B: 2012	Qualitative
		Taste	IS 3025 (Part 7 & 8): 1984/ APHA (22 nd Edition) 2160 C: 2012	Qualitative

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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
		Turbidity	IS 3025 (Part 10): 1984(RA 2002) APHA (22 nd Edition) 2130 B: 2012	0.1 NTU to 1000 NTU
		Total Dissolved Solids	IS 3025 (Part 16): 1984 (RA 2006) APHA (22 nd Edition) 2540 B: 2012	5 mg/l to 10000 mg/l
		pH	IS 3025 (Part 11): 1983 (RA 2002) APHA (22 nd Edition) 4500H ⁺ B: 2012	1 to 14
		Barium	IS 15302: 2003 APHA (22 nd Edition) 3125 B: 2012	0.002 mg/l to 50 mg/l
		Copper	IS 3025 (Part 42): 1992 (RA 2003) APHA (22 nd Edition) 3125 B: 2012	0.02 mg/l to 50 mg/l
		Manganese	IS 3025 (Part 59): 200 APHA (22 nd Edition) 3125 B: 2012	0.05 mg/l to 50 mg/l
		Nitrate	IS 3025 (Part 34): 1988 (RA 2003)	0.5 mg/l to 100 mg/l

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		Nitrite	IS 3025 (Part 34): 1988 (RA 2003)	0.01 mg/l to 100 mg/l
	Packaged Drinking water/Packaged Natural Mineral water/ Borewell Water/ Surface Water/ Swimming Pool Water	Fluoride	IS 3025 (Part 60): 2008 APHA (22 nd Edition) 4500F D: 2012	0.1 mg/l to 100 mg/l
		Zinc	IS 3025 (Part 49): 1994 (RA 2003) APHA (22 nd Edition) 3125 B: 2012	0.02 mg/l to 50 mg/l
		Silver	IS 13428: 2005 Annexure J APHA (22 nd Edition) 3125 B: 2012	0.005 mg/l to 50 mg/l
		Chloride	IS 3025 (Part 32): 1988 (RA 2003) APHA (22 nd Edition) 4500Cl-A: 2012	0.5 mg/l to 10000 mg/l
		Selenium	IS 15303: 2003 APHA (22 nd Edition) 3125 B: 2012	0.005 mg/l to 50 mg/l
		Sulphate	IS 3025 (Part 24) 1986 (RA 1992) APHA (22 nd Edition) 4500 SO ₄ ²⁻ E: 2012	5 mg/l to 1000 mg/l
		Alkalinity (as HCO ₃)	IS 3025 (Part 23): 1986 (RA 2003) APHA (22 nd Edition) 2320B: 2012	1 mg/l to 10000 mg/l

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		Calcium	IS 3025 (Part 40): 1991 (RA 2003) APHA (22 nd Edition) 3500 Ca B: 2012	0.5 mg/l to 1000 mg/l
		Magnesium	IS 3025 (Part 46): 1994 (RA 2003) APHA (22 nd Edition) 3500 Mg B: 2012	0.5 mg/l to 1000 mg/l
	Packaged Drinking water/Packaged Natural Mineral water/ Borewell Water/ Surface Water/ Swimming Pool Water	Sodium	IS 3025 (Part 45) 1993 (RA 2003/ APHA (22 nd Edition) 3500 Na B: 2012	1 mg/l to 100 mg/l
		Phenolic Compounds	IS 3025 (Part 43): 1992 (RA 2003) APHA (22 nd Edition) 5530 C: 2012	0.01 mg/l to 100 mg/l
		Mineral Oil	IS 3025 (Part 39): 1991 (RA 2003) APHA (22 nd Edition) 5520 C: 2012	0.01 mg/l to 50 mg/l
		Anionic Surface Active Agents (MBAS)	IS 13428: 2005 Annexure K APHA (22 nd Edition) 5540 C: 2012	0.05 mg/l to 100 mg/l
		Sulphide (H ₂ S)	IS 3025 (Part 29): 1986 (RA 2003) APHA (22 nd Edition)	0.05 mg/l to 20 mg/l

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			4500S ² -D: 2012	
		Antimony	IS 15303: 2003 APHA (22 nd Edition) 3125 B: 2012	0.002 mg/l to 50 mg/l
		Borates (B)	IS 13428: 2005 Annexure H APHA (22 nd Edition) 3125 B: 2012	0.02 mg/l to 100 mg/l
		Iron	IS 3025 (Part 53): 2003 APHA (22 nd Edition) 3125 B: 2012	0.01 mg/l to 50 mg/l
		Aluminum	IS 15302: 2003 APHA (22 nd Edition) 3125 B: 2012	0.01 mg/l to 50 mg/l
		Residual Free Chlorine	IS 3025 (Part 26): 1986 (RA 2003) APHA (22 nd Edition) 4500: 2012 Clause B	0.1 mg/l to 100 mg/l
	Packaged Drinking water/Packaged Natural Mineral water/ Borewell Water/ Surface Water/ Swimming Pool Water	Mercury	IS 3025 (Part 48): 1994 (RA 2003) APHA (22 nd Edition) 3125 B: 2012	0.0002 mg/l to 50 mg/l
		Cadmium	IS 3025 (Part 41): 1992 (RA 2003) APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50 mg/l

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		Arsenic	IS 3025 (Part 37): 1988 (RA 2003) APHA (22 nd Edition) 3125 B: 2012	0.005 mg/l to 50 mg/l
		Cyanide	IS 3025 (Part 27): 1986 (RA 2009) APHA (22 nd Edition) 4500 CN ⁻ · C: 2012	0.01 mg/l to 100 mg/l
		Lead	IS 3025 (Part 47): 1994 (RA 2003) APHA (22 nd Edition) 3125 B: 2012	0.005 mg/l to 50 mg/l
		Chromium	IS 13428: 2005 Annexure J APHA (22 nd Edition) 3125 B: 2012	0.01 mg/l to 50 mg/l
		Nickel	IS 13428: 2005 Annexure L APHA (22 nd Edition) 3125 B: 2012	0.01 mg/l to 50 mg/l
		Molybdenum	APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50.0 mg/l
		Chloramines (as Cl ₂)	IS 3025 (Part 26): 1986 (RA 2003)	0.1 mg/l to 100 mg/l
		Ammonia (as total ammonia-N)	IS 3025 (Part 34): 1988 (RA 2003) APHA (22 nd Edition) 4500 NH ₃ C: 2012	0.1 mg/l to 100 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
	Packaged Drinking water/Packaged Natural Mineral water/Borewell Water/Surface Water/Swimming Pool Water	Heavy metals (as Pb)	IS 7017: 1973	0.1 mg/l to 10.0 mg/l
		Total hardness	IS 3025 (Part 21): 2009 APHA (22 nd Edition) 2340 C: 2012	0.1 mg/l to 100 mg/l
		Alkalinity (as CaCO ₃)	IS 3025 (Part 23): 1986 (RA 2003) APHA (22 nd Edition) 2320B: 2012	1 mg/l to 10000 mg/l
		Dissolved Oxygen	IS 3025 (Part 38): 1989 (RA 1999) APHA (22 nd Edition) 4500-O C: 2012	0.1 mg/l to 50.0 mg/l
		Chemical Oxygen Demand (COD)	IS 3025 (Part 58): 2006 APHA (22 nd Edition) 5220B: 2012	5 mg/l to 10000 mg/l
		Biochemical Oxygen Demand (BOD)	IS 3025 (Part 44): 1993 (RA 1991) APHA (22 nd Edition) 5210B: 2012	1 mg/l to 10000 mg/l
		Silica (as SiO ₂)	IS 3025 (Part 35): 1988 (RA 1999) APHA (22 nd Edition) 4500 SiO ₂ C: 2012	0.1 mg/l to 1000 mg/l
		Phosphorous	IS 3025 (Part 31): 1988 (RA 1999) APHA (22 nd Edition) 4500 P D: 2012	0.1 mg/l to 1000 mg/l

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		Oil & Grease	IS 3025 (Part 39): 1984 (RA 2002) APHA (22 nd Edition) 5520E: 2012	5 mg/l to 100.0 mg/l
		Potassium	IS 3025 (Part 45): 1993 (RA 2003) APHA (22 nd Edition) 3500 K B: 2012	1.0 mg/l to 100.0 mg/l
		Total acidity	IS 3025 (Part 22): 1986 (RA 1998) APHA (22 nd Edition) 2320B: 2012	1.0 mg/l to 1000.0 mg/l
		Total Suspended Solids (TSS)	IS 3025 (Part 17): 1984 (RA 2002) APHA (22 nd Edition) 2540D: 2012	5 mg/l to 10,000mg/l
3.	Water for Processed Food Industry	Colour	IS 3025 (Part 4): 1983 (RA 2002) APHA (22 nd Edition) 2120B: 2012	1 Hazen to 100 Hazen
		Turbidity	IS 3025 (Part 10): 1984 (RA 2002) APHA (22 nd Edition) 2130B: 2012	0.1 NTU to 1000 NTU
		Odour	IS 3025 (Part 5): 1983 (RA 2002) APHA (22 nd Edition) 2150B:	Qualitative

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			2012	
		Total solids	IS 3025(Part 16): 1984 (RA 2006) APHA (22 nd Edition) 2540B: 2012	1 mg/l to 10000 mg/l
		Total hardness	IS 3025 (Part 21): 2009/ APHA (22 nd Edition) 2340C: 2012	0.5 mg/l to 1000 mg/l
		Sulphate	IS 3025 (Part 24): 1986 (RA1992) APHA (22 nd Edition) 4500 SO ₄ ²⁻ E: 2012	1.0 mg/l to 1000.0 mg/l
		Fluoride	IS 3025 (Part 60): 2008 APHA (22 nd Edition) 4500 FD	0.1 mg/l to 100 mg/l
		Chloride	IS 3025 (Part 32): 1988 (RA 2003) APHA (22 nd Edition) 4500Cl ⁻ A: 2012	0.5 mg/l to 10000 mg/l
		Cyanide	IS 3025 (Part 27): 1986 (RA 2009) APHA (22 nd Edition) 4500 CN ⁻ C: 2012	0.02 mg/l to 100 mg/l
		Selenium	IS 15303: 2003 APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50.0 mg/l

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	Water for Processed Food Industry	Iron	IS 3025 (Part 53): 2003 APHA (22 nd Edition) 3125 B: 2012	0.1 mg/l to 100.0 mg/l
		Magnesium	IS 3025 (Part 40): 1991 (RA 2003) APHA (22 nd Edition) 3500 Mg B: 2012	0.5 mg/l to 1000 mg/l
		Manganese	IS 3025 (Part 59): 2006 APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50.0 mg/l
		Copper	IS 3025 (Part 42): 1992 (RA 2003) APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50.0 mg/l
		Lead	IS 3025 (Part 47): 1994 (RA 2003) APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50.0 mg/l
		Chromium	IS 13428: 2005 Annexure J APHA (22 nd Edition) 3125 B: 2012	0.05 mg/l to 50.0 mg/l
		Zinc	IS 3025 (Part 49): 1994 (RA 2003) APHA (22 nd Edition) 3125 B: 2012	0.02 mg/l to 50.0 mg/l
		Arsenic	IS 3025 (Part 2)2004/ APHA	0.001 mg/l to

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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
			(22 nd Edition) 3125 B: 2012	50.0 mg/l
		Nitrate	IS 3025 (Part 34): 1988 (RA 2003)	1 mg/l to 100 mg/l
		Phenolic substances	IS 3025 (Part 43): 1992/ APHA (22 nd Edition) 5530C: 2012	0.001 mg/l to 100 mg/l
4.	Water for fermentation industry	Colour	IS 3025 (Part 4): 1983 (RA 2002) APHA (22 nd Edition) 2120B: 2012	1 Hazen to 100 Hazen
		Turbidity	IS 3025 (Part 10): 1984 (RA 2002) APHA (22 nd Edition) 2130 B: 2012	0.1 NTU to 1000 NTU
		Odour	IS 3025 (Part 5): 1983 (RA 2002) APHA (22 nd Edition) 2150B: 2012	Qualitative
		Total solids	IS 3025 (Part 16): 1984 (RA 2006) APHA (22 nd Edition) 2540B: 2012	1 mg/l to 10000 mg/l
		Total hardness	IS 3025 (Part 21): 2009	0.5 mg/l to 1000

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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
			APHA (22 nd Edition) 2340C: 2012	mg/l
		Sulphate	IS 3025 (Part 24): 1986 (RA 1992) APHA (22 nd Edition) 4500 SO ₄ ²⁻ E: 2012	1.0 mg/l to 1000.0 mg/l
		Fluoride	IS 3025 (Part 60): 2008/ APHA (22 nd Edition) 4500F.D	0.1 mg/l to 100.0 mg/l
		Chloride	IS 3025 (Part 32): 1988 (RA 2003) APHA (22 nd Edition) 4500 Cl ⁻ A: 2012	0.5 mg/l to 10000 mg/l
		Cyanide	IS 3025 (Part 27): 1986 (RA 2009) APHA (22 nd Edition) 4500 CN ⁻ C: 2012	0.02 mg/l to 100 mg/l
		Selenium	IS 15303: 2003 APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50.0 mg/l
	Water for fermentation industry	Iron	IS 3025 (Part 53): 2003 APHA (22 nd Edition) 3125 B: 2012	0.1 mg/l to 100.0 mg/l
		Magnesium	IS 3025 (Part 46): 1994 (RA 2003) APHA (22 nd Edition) 3500 Mg-B: 2012	0.5 mg/l to 1000 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
		Manganese	IS 3025 (Part 59): 2006 APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50.0 mg/l
		Copper	IS 3025 (Part 42): 1992 (RA 2003) APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50.0 mg/l
		Lead	IS 3025 (Part 47): 1994 (RA 2003) APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50.0 mg/l
		Chromium	IS 3025 (Part 52): 2003 APHA (22 nd Edition) 3125 B: 2012	0.05 mg/l to 50.0 mg/l
		Zinc	APHA (22 nd Edition) 3125 B: 2012	0.02 mg/l to 50.0 mg/l
		Arsenic	IS 3025 (Part 37): 1988 (RA 2003) APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50.0 mg/l
		Nitrate	IS 3025 (Part 34): 1988 (RA 2003)	1 mg/l to 100 mg/l
		Phenolic substances	IS 3025 (Part 43): 1992 APHA (22 nd Edition) 5530C: 2012	0.001 mg/l to 100 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
	Water for fermentation industry	Cadmium	APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50 mg/l
		Mercury	IS 3025 (Part 2): 2004 APHA (22 nd Edition) 3125 B: 2012	0.0002 mg/l to 50 mg/l
		Alkalinity(as CaCO ₃)	IS 3025 (Part 23): 1986 (RA 2006) APHA (22 nd Edition) 2320B: 2012	1 mg/l to 10000 mg/l
		Calcium	IS 3025 (Part 40): 1991 (RA 2003) APHA (22 nd Edition) 3500-Ca B: 2012	0.5 mg/l to 1000 mg/l
5.	Construction Water	pH value	IS 3025 (Part 11): 1983 (RA 2002) APHA (22 nd Edition) 4500 H ⁺ B: 2012	1.0 to 14.0
		Amount of 0.02N NaOH required to neutralize 100ml sample using phenolphthalein indicator(Limits of Acidity)	IS 3025 (Part 22): 1986 (RA 1998)	0.1 ml to 10 ml
		Amount of 0.02N H ₂ SO ₄ required to neutralize 100ml sample using	IS 3025 (Part 23): 1986 (RA 2006)	0.1 ml to 50 ml

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		mixed indicator (Limits of Alkalinity)		
		Inorganic Solids	IS 3025 (Part 18): 1984 (RA 2002)	01 to 10000 mg/l
		Organic Solids	IS 3025 (Part 18): 1984 (RA 2002)	01 mg/l to 500 mg/l
		Sulphates as SO ₃	IS 3025 (Part 24): 1986 (RA 1992) APHA (22 nd Edition) 4500 SO ₄ ²⁻ C: 2012	01 mg/l to 3000 mg/l
		Chloride as Cl	IS 3025 (Part 32) 1988 (RA 2003) APHA (22 nd Edition) 4500 Cl-A: 2012	05 mg/l to 3000 mg/l
	Construction Water	Suspended Matter	IS 3025 (Part 17): 1984 (RA 2002) APHA (22 nd Edition) 2540D: 2012,	05 mg/l to 3000 mg/l
6.	Waste Water	Total dissolved Solids	IS 3025 (Part 16): 1984 (RA 2006) APHA (22 nd Edition) 2540B: 2012	5 mg/l to 25,000 mg/l
		Total Suspended Solids (TSS)	IS 3025 (Part 17): 1984 (RA 2002) APHA (22 nd Edition) 2540D: 2012	5 mg/l to 25,000 mg/l
		Total Kjeldahl Nitrogen	IS 3025 (Part 34): 1988 (RA 1999)	0.1 mg/l to 500 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
			By Kjeldahl method	
		Dissolved Oxygen	IS 3025 (Part 38): 1989 (RA 1999) APHA (22 nd Edition) 4500 O-C: 2012	0.1 mg/l to 20.0 mg/l
		Chemical Oxygen Demand (COD)	IS 3025 (Part 58): 2006 APHA (22 nd Edition) 5220B: 2012	5 mg/l to 50000 mg/l
		Biochemical Oxygen Demand (BOD)	IS 3025 (Part 44): 1993 (RA 1991) APHA (22 nd Edition) 5210B: 2012	1 mg/l to 50000 mg/l
		Silica (as SiO ₂)	IS 3025 (Part 35): 1988 (RA 1999) APHA (22 nd Edition) 4500 SiO ₂ C: 2012	0.1 mg/l to 1000 mg/l
		Phosphorous	IS 3025 (Part 31): 1988 (RA 1999) APHA (22 nd Edition) 4500P D: 2012	0.1 mg/l to 1000 mg/l
		Oil & Grease	IS 3025 (Part 39): 1984 (RA 2002) APHA (22 nd Edition) 5520 E: 2012	5.0 mg/l to 100.0 mg/l
	Waste Water	pH value	IS 3025 (Part 11): 1983 (RA 2002) APHA (22 nd Edition) 4500	1 to 14

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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
			H ⁺ B: 2012	
7.	Dialysis water	Calcium	IS 3025 (Part 40): 1991 (RA 2003) APHA (22 nd Edition) 3500-Ca B: 2012	0.1 mg/l to 50.0 mg/l
		Magnesium	IS 3025 (Part 46): 1994 (RA 2003) APHA (22 nd Edition) 3500 Mg-B: 2012	0.1 mg/l to 50.0 mg/l
		Potassium	IS 3025 (Part 45): 1993 (RA 2003) APHA (22 nd Edition) 3500 K-B: 2012	1.0 mg/l to 100.0 mg/l
		Sodium	IS 3025 (Part 45): 1993 (RA 2003) APHA (22 nd Edition) 3500 Na-B: 2012	1.0 mg/l to 100.0 mg/l
		Antimony	APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50.0 mg/l
		Arsenic	APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50.0 mg/l
		Zinc	APHA (22 nd Edition) 3125 B: 2012	0.02 mg/l to 50.0 mg/l
		Barium	APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50.0 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
	Dialysis water	Beryllium	APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50.0 mg/l
		Cadmium	APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50.0 mg/l
		Chromium	APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50.0 mg/l
		Lead	APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50.0 mg/l
		Mercury	APHA (22 nd Edition) 3125 B: 2012	0.0002 mg/l to 50.0 mg/l
		Selenium	APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50.0 mg/l
		Silver	APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50.0 mg/l
		Aluminium	APHA (22 nd Edition) 3125 B: 2012	0.01 mg/l to 50.0 mg/l
		Chloramines	IS 3025 (Part 26): 1986	0.04 mg/l to 50.0 mg/l
		Total chlorine	IS 3025 (Part 26): 1986 IS 3025 (Part 45): 1993 (RA 2003) APHA (22 nd Edition) 4500:	0.1 mg/l to 50.0 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
			2012 Clause B	
		Copper	APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50.0 mg/l
		Fluoride	APHA (22 nd Edition) 4500F.D	0.1 mg/l to 100.0 mg/l
	Dialysis water	Nitrate	IS 3025 (Part 34): 1988 (RA 2003)	1 mg/l to 100.0 mg/l
		Thallium	APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 0.002 mg/l
		Sulphate	IS 3025 (Part 24): 1986 (RA 1992) APHA (22 nd Edition) 4500 SO ₄ ²⁻ E: 2012	5 mg/l to 1000 mg/l
8.	Water for textile industry	Colour	IS 3025 (Part 4): 1983 (RA 2002) APHA (22 nd Edition) 2120B: 2012	1 Hazen to 100 Hazen
		Turbidity	IS 3025 (Part 10): 1984 (RA 2002) APHA (22 nd Edition) 2130 B: 2012	0.1 NTU to 1000 NTU
		Total hardness	IS 3025 (Part 21): 2009 APHA (22 nd Edition) 2340 C: 2012	0.5 mg/l to 1000 mg/l
		Sulphate	IS 3025 (Part 24): 1986 (RA	1.0 mg/l to

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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
			1992) APHA (22 nd Edition) 4500 SO ₄ ²⁻ E: 2012	1000.0 mg/l
		Chloride	IS 3025 (Part 32): 1988 (RA 2003) APHA (22 nd Edition) 4500 Cl ⁻ A: 2012	0.5 mg/l to 10000 mg/l
		Iron	IS 3025 (Part 53): 2003, IS 3025 (Part 2): 2004/ APHA (22 nd Edition) 3125 B: 2012	0.1 mg/l to 100.0 mg/l
		Manganese	IS 3025 (Part 59): 2006, IS 3025 (Part 2): 2004/ APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50.0 mg/l
	Water for textile industry	pH	IS 3025 (Part 11): 1983 (RA 2002) APHA (22 nd Edition) 4500H ⁺ B: 2012	1 to 14
		Aluminium	IS 15302: 2003 IS 3025 (Part 2): 2004 APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50.0 mg/l
		Total alkalinity (as CaCO ₃)	IS 3025 (Part 23): 1986 (RA 2003) APHA (22 nd Edition) 2320B: 2012	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
9.	Water for Ice manufacture	Iron and manganese added together	IS 3025 (Part 53): 2003 & IS 3025 (Part 59): 2006/ APHA (22 nd Edition) 3125 B: 2012	0.1 mg/l to 150.0 mg/l
		Corrosivity	IS 201: 1992 (RA 2008) Ann.A	1 to 14
		odour	IS 3025 (Part 5): 1983 (RA 2002) APHA (22 nd Edition) 2150B: 2012	Qualitative
		Colour	IS 3025 (Part 4): 1983 (RA 2002) APHA (22 nd Edition) 2120 B: 2012	1 Hazen to 100 Hazen
		Turbidity	IS 3025 (Part 10): 1984 (RA 2002) APHA (22 nd Edition) 2130 B: 2012	0.1 NTU to 1000 NTU
		Odour	IS 3025 (Part 5): 1983 (RA 2002)/ APHA (22 nd Edition) 2150 B: 2012	Qualitative
		Total dissolved solids	IS 3025 (Part 16): 1984 (RA 2006)	5 mg/l to 10000 mg/l
		Total hardness	IS 3025 (Part 21): 2009	0.5 mg/l to 1000 mg/l
	Water for Ice manufacture	Sulphate	IS 3025 (Part 24): 1986 (RA 1992)	5.0 mg/l to 1000.0 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
	Fluoride		IS 3025 (Part 60): 2008 APHA (22 nd Edition) 4500F D	0.1 to 100.0
	Chloride		IS 3025 (Part 32): 1988 (RA 2003) APHA (22 nd Edition) 4500Cl-A: 2012	5 mg/l to 10000 mg/l
	Cyanide		IS 3025 (Part 27): 1986 (RA 2009) APHA (22 nd Edition) 4500 CN-C: 2012	0.02 mg/l to 100 mg/l
	Selenium		APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50.0 mg/l
	Iron		IS 3025 (Part 2): 2004 APHA (22 nd Edition) 3125 B: 2012	0.1 mg/l to 100.0 mg/l
	Magnesium		IS 3025 (Part 46): 1994 (RA 2003) APHA (22 nd Edition) 3500 Mg B: 2012	0.5 mg/l to 1000 mg/l
	Manganese		APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50.0 mg/l
	Copper		APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50.0 mg/l
	Lead		APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50.0 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
	Water for Ice manufacture	Chromium	APHA (22 nd Edition) 3125 B: 2012	0.05 mg/l to 50.0 mg/l
		Zinc	APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50.0 mg/l
		Arsenic	APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50.0 mg/l
		Phenolic substances	IS 3025 (Part 43): 1992 APHA (22 nd Edition) 5530C: 2012	0.001 mg/l to 100 mg/l
		Cadmium	APHA (22 nd Edition) 3125 B: 2012	0.001 mg/l to 50 mg/l
		Mercury	APHA (22 nd Edition) 3125 B: 2012	0.0002 mg/l to 50 mg/l
10	Reagent grade water	Specific conductivity	IS 3025 (Part 14): 1984 APHA (22 nd Edition) 2510B: 2012	0.1 µS/cm to 0.2 10000 µS/cm
		pH at 25°C	IS 3025 (Part 11): 1983 (RA 2002) APHA (22 nd Edition) 4500H ⁺ B: 2012	1 to 14
		Total solids or non volatile residue at 105°C	IS 3025 (Part 16): 1984 (RA 2006) APHA (22 nd Edition) 2540B: 2012	1 mg/l to 10000 mg/l
		Silica(as SiO ₂)	IS 3025 (Part 35): 1988 (RA	0.1 mg/l to 1000

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			1999) APHA (22 nd Edition) 4500 SiO ₂ C: 2012	mg/l
		Colour retention of KMnO ₄	IS 1070: 1992 (RA 2008) Ann.A	Qualitative
-X-X-X-X-X-X-X-X-X-X-X-X-X-X-				

***NOTE:** The Laboratory has demonstrated competence for the stated scope for **WATER**. This however **does not fully cover** the specification requirements of **BIS for the Packaged Drinking Water as per IS14543 and the Packaged Natural Mineral Water IS13428**.