

Laboratory	UPASI Tea Research Foundation, Tea Research Institute, NIRAR Dam, P.O. Valparai, Coimbatore Dist., Tamil Nadu		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Chemical Testing	Issue Date	02.01.2015
Certificate Number	T-0620	Valid Until	01.01.2017
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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.	FERTILIZERS			
1.	Micro Nutrient Mixture	Zinc	FCO, 1985 (Amd. Nov 2012)	4 g/100g to 40 g/100g
		Mg	FCO, 1985 (Amd. Nov 2012)	0.1 g/100g to 8 g/100g
		Mn	FCO, 1985 (Amd. Nov 2012)	0.1 g/100g to 8 g/100g
		Na	UPASI/SOP/CHE/51 (Issue Date. 29.09.2014)	420 mg/kg to 2800 mg/kg
		Fe	FCO, 1985 (Amd. Nov 2012)	100 mg/kg to 8000 mg/kg
		pH	IS 8249: 1994	3.0 to 7.0
2.	Manganese Sulphate	Mn	FCO, 1985 (Amd. Nov 2012)	12.5 g/100g to 62.5 g/100g
	Magnesium Sulphate	MgSO ₄	IS 2730 : 1977 (RA Feb 2010), Amd No. 1/ FCO, 1985 (Amd. Nov 2012)	10 g/100g to 102 g/100g
3.	Boric Acid	Boric Acid	IS 10116: 1982 (RA Feb 2011), Amd No. 1	10 g/100g to 100 g/100g
4.	Copper Oxy Chloride (WP/WDP)	Cu	IS 1506: 1977 (RA Mar 2012)	10 g/100g to 60 g/100g
		Suspensibility	IS 6940: 1982 (RA Mar 2012), Amd No. 2	10 g/100g to 95 g/100g
		pH	IS 1507: 1977 (RA Mar 2012), Amd No. 1	4 to 10

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5.	Copper Sulphate	Cu	IS 261: 1982 (RA Feb 2011), Amd. No. 1	15 g/100g to 26 g/100g
		pH	IS 261: 1982 (RA Feb 2011), Amd. No. 1	2.5 to 5.0
6.	Dicofol	Dicofol	IS 5279: 1969 (RA Mar 2012), Amd. No. 3	15 g/100g to 20 g/100g
7.	Fertilisers (NH ₄) ₂ SO ₄	N	IS 6092 (Part2): 1985 (RA Feb 2011)	15 g/100g to 22 g/100g
	MOP	K ₂ O	IS 6092 (Part4): 1985 (RA Feb 2012)	55 g/100g to 62 g/100g
8.	Elemental Sulphur	S	IS 6655: 1972 (RA Feb 2010), Amd. No. 1	85 g/100g to 100 g/100g
9.	Wettable Sulphur	S	IS 3383: 1982 (RA Nov 2009), Amd. No. 2	30 g/100g to 85 g/100g
		Suspensibility	IS 6940: 1982 (RA 1997)	10 g/100g to 95 g/100g
10.	2,4-D	2,4-D Acid	IS 1488: 1989 (RA Nov 2009), Amd. No. 1	75 g/100g to 85 g/100g
11.	Zinc sulphate	Zn	IS 8249: 1994 (RA 2011 Amd. No. 2)	15 g/100g to 40 g/100g
		Fe	FCO, 1985 (Amd. Nov 2012)	100 mg/kg to 8000 mg/kg
		Na	UPASI/SOP/CHE/509 (Issue Date. 29.09.2014)	420 mg/kg to 2800 mg/kg
		pH	IS 8249: 1994	4.0 to 7.0

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II. FOOD & AGRICULTURAL PRODUCTS

1. Tea	Total Ash		IS 13854: 1994/ ISO 1575: 1987(RA April 2009)	1 g/100g to 25 g/100g
	Water Soluble Ash & Water Insoluble Ash		IS 13855: 1993/ ISO 1576: 1988 (RA April 2009)	5 g/100g to 80 g/100g
	Alkalinity of Water Soluble		IS 13856: 1993/ ISO 1578: 1975 (RA April 2009)	0.3 g/100g to 10 g/100g
	Acid Insoluble Ash		IS 13857: 1993/ ISO 1577: 1987 (RA April 2009)	0.1 g/100g to 20 g/100g
	Loss of Moisture at 103 °C		IS 13853: 1994/ ISO 1573: 1980 (RA April 2009)	0.1 g/100g to 25 g/100g
	Water Extract		IS 13862: 1999/ ISO 9768: 1994 (RA April 2009)	5 g/100g to 70 g/100g
	Crude Fibre		ISO 15598: 1999 (E)	2 g/100g to 50 g/100g
	Caffeine Content		ISO 10727: 2002 (E) / AOAC 969.15	0.1 g/100g to 10 g/100g
	Theaflavin		UPASI/SOP/TT/29/2006	0.2 g/100g to 3 g/100g
	Thearubigin		UPASI/SOP/TT/29/2006	2 g/100g to 20 g/100g
	High polymerised Substance		UPASI/SOP/TT/29/2006	2 g/100g to 20 g/100g
	Total liquor Color		UPASI/SOP/TT/29/2006	1 to 10
	Total Polyphenol		ISO 14502-1: 2005 (E)	1 g/100g to 30 g/100g
	Iron Filing		IS 3633: 2005 & UPASI/SOP/TT/35/2014	3 mg/kg to 2000 mg/kg

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	Tea (Pesticide Residue)	Dicofol	IS 14629: 1999 (RA Nov 2009)	0.1 mg/kg to 5.0 mg/kg
		Ethion	IS 11773: 2003 (RA Nov 2009)	0.1 mg/kg to 5.0 mg/kg
		Endosulfan	IS 12611: 1989 (RA Nov 2009)	0.1 mg/kg to 5.0 mg/kg
		Quinalphos	IS 14437: 1997 (RA Nov 2009)	0.1 mg/kg to 5.0 mg/kg
		Chlorpyrifos	IS 12365: 1988 (RA Nov 2009)	0.1 mg/kg to 5.0 mg/kg
		Lambdacyhalothrin	AOAC 998.01 (19 th Edition)	0.1 mg/kg to 5.0 mg/kg
		Beta cyfluthrin	AOAC 998.01 (19 th Edition)	0.1 mg/kg to 5.0 mg/kg
		Fenpropathrin	AOAC 998.01 (19 th Edition)	0.1 mg/kg to 5.0 mg/kg
		Fenvalerate	AOAC 998.01 (19 th Edition)	0.1 mg/kg to 5.0 mg/kg
		Propargite	UPASI/SOP/ENT/24/2005	1.0 mg/kg to 10.0 mg/kg
		Fenpyroximate	UPASI/SOP/ENT/43/2009	0.1 mg/kg to 5.0 mg/kg
		Hexythiazox	UPASI/SOP/ENT/44/2009	0.1 mg/kg to 5.0 mg/kg
		Ethion	UPASI/SOP/RES/58/2014	0.1 mg/kg to 5.0 mg/kg
		Dicofol	UPASI/SOP/RES/58/2014	0.1 mg/kg to 5.0 mg/kg
		Quinalphos	UPASI/SOP/RES/58/2014	0.01 mg/kg to 5.0 mg/kg
		Propargite	UPASI/SOP/RES/58/2014	1.0 mg/kg to 10.0 mg/kg
	Fenazaquin	UPASI/SOP/RES/58/2014	0.1 mg/kg to 5.0 mg/kg	

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	Tea (Trace Metal Elements)	Lead	AOAC 999.11 (19 th edition)	2.0 mg/kg to 10.0 mg/kg
		Cadmium	AOAC 999.11 (19 th edition)	0.2 mg/kg to 10.0 mg/kg
		Copper	AOAC 971.20 (19 th edition)	0.2 mg/kg to 150.0 mg/kg
		Nickel	AOAC 971.20 (19 th edition)	2.0 mg/kg to 50.0 mg/kg
		Arsenic	UPASI/SOP/ENT/35/2006	1.0 mg/kg to 10.0 mg/kg
		Chromium	UPASI/SOP/ENT/34/2006	2.5 mg/kg to 50.0 mg/kg
		Zinc	AOAC 999.11 (19 th edition)	2.0 mg/kg to 100.0mg/kg

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