

Laboratory Rashtriya Chemicals and Fertilizers Limited (CCL, R&D-Agri Lab),  
Chembur, Mumbai, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6753 (in lieu of T-3789)

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Validity 29.01.2018 to 28.01.2020

Last Amended on --

Sl.	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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#### CHEMICAL TESTING

I.	SOIL			
1.	Soil	Mineralizable Nitrogen (Available Nitrogen)	Lab/SOP/11, Issue No. 1, Year 2015	2.5 kg/ha to 500 kg/ha
		Available Phosphorus	Lab/SOP/11, Issue No. 1, Year 2015	2.5 kg/ha to 60 kg/ha
		Available Potassium	Lab/SOP/11, Issue No. 1, Year 2015	10 kg/ha to 1000 kg/ha
		Available Calcium	Lab/SOP/11, Issue No. 1, Year 2015	2.5 kg/ha to 400 kg/ha
		Available Magnesium	Lab/SOP/11, Issue No. 1, Year 2015	2.5 kg/ha to 150 kg/ha
		Available Sulphur	Lab/SOP/11, Issue No. 1, Year 2015	1.5 kg/ha to 300 kg/ha
		pH	Lab/SOP/11, Issue No. 1, Year 2015	3 to 12
		Conductivity	Lab/SOP/11, Issue No. 1, Year 2015	10 µS/cm to 900 µS/cm
		Organic Carbon	Lab/SOP/11, Issue No. 1, Year 2015	0.1% to 3%
		Zinc	Lab/SOP/11, Issue No. 1, Year 2015	0.1 mg/kg to 50 mg/kg
		Iron	Lab/SOP/11, Issue No. 1, Year 2015	0.1 mg/kg to 500 mg/kg
		Copper	Lab/SOP/11, Issue No. 1, Year 2015	0.1 mg/kg to 150 mg/kg
		Manganese	Lab/SOP/11, Issue No. 1, Year 2015	0.1 mg/kg to 1000 mg/kg
		Boron	Lab/SOP/11, Issue No. 1, Year 2015	0.1 mg/kg to 50 mg/kg
		Molybdenum	Lab/SOP/11, Issue No. 1, Year 2015	0.1 mg/kg to 50 mg/kg

Rozina  
Convenor

N. Venkateswaran  
Program Director

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ii.	<b>FERTILIZERS</b>			
1.	<b>NPK Fertilizers</b>	Moisture	FCO-1985 Amended April 2015, Page No.71, AOAC 950.01- Pg.11	0.10% to 6.00%
		Total Nitrogen as N	FCO-1985 Amended April 2015, Page No.71, AOAC 892.01- Pg.19	12.00% to 21.00%
		Ammoniacal Nitrogen as N	FCO-1985 Amended April 2015, Page No.71, AOAC 920.03- Pg.19	3.00% to 14.00%
		Nitrate Nitrogen as N	FCO-1985 Amended April 2015, Page No.71, AOAC 2.4-12(1995)	3.00% to 12.00%
		Total Phosphate as P <sub>2</sub> O <sub>5</sub>	FCO-1985 Amended April 2015, IS 6092 (Part 3)-1985	6.00% to 24.00%
		Water Soluble Phosphate P <sub>2</sub> O <sub>5</sub>	FCO-1985 Amended April 2015, Page No.71, AOAC 958.01- Pg.12	3.00% to 14.00%
		Potassium as K <sub>2</sub> O	FCO-1985 Amended April 2015, Page No.71, AOAC 983.02- Pg.11. IS 6092 (Part 4)-1985, AOAS-15 <sup>th</sup> Edition-1990	12.0 % to 21.00%
2.	<b>Urea</b>	Moisture	FCO-1985 Amended April 2015 / AOAC 920.04, 955.06, 960.03, 971.01, 983.02, IS 6092-2004	0.10%to 6.00%
		Biuret	FCO-1985 Amended April 2015 Pg.82/ AOAC 960.04, Pg.22 IS 1781-1975	0.1% to 2.00%
		Urea Nitrogen as N	FCO-1985 Amended April 2015, IS 1781-1975	44.00 % to 48.00%

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3.	<b>Mixture of Micro Nutrients Fertilizer</b>	Zinc	Lab/SOP/12, Issue No. 1, Year 201	0.02% to 14.00%
		Iron	Lab/SOP/12, Issue No. 1, Year 2015	0.01% to 13.00%
		Copper	Lab/SOP/12, Issue No. 1, Year 2015	0.02% to 12.00%
		Manganese	Lab/SOP/12, Issue No. 1, Year 2015	0.02% to 12.00%
		Boron	Lab/SOP/12, Issue No. 1, Year 2015	0.01% to 10.00%
		Molybdenum	Lab/SOP/12, Issue No. 1, Year 2015	0.05% to 10.00%
		Magnesium	Lab/SOP/12, Issue No. 1, Year 2015	0.05% to 17.00 %
4.	<b>100% Water Soluble Fertilizers</b>	Water Soluble Phosphate P <sub>2</sub> O <sub>5</sub>	FCO-1985 Amended April 2015 AOAC 920.04, 955.06, 960.03, 971.01, 983.02, IS 6092-2004	3.00% to 22.00%
		Nitrate Nitrogen as N	FCO-1985 Amended April 2015, Pg.73, AOAC 920.01 Pg.No.17	2.50% to 12.00%
		Ammoniacal Nitrogen as N	FCO-1985 Amended April 2015, AOAC 920.04, Pg.No.19	3.00% to 14.00%
		Potassium as K <sub>2</sub> O	FCO-1985 Amended April 2015, AOAC 983.02, Pg.No.23	12.00% to 21.00%
		Urea Nitrogen as N	FCO-1985 Amended April 2015, IS 6092(Part 2/Sec2)-2000	10.00% to 48.00%

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iii.	<b>WATER</b>			
1.	<b>Domestic Water</b>	pH	IS:3025( Part 11) 1983	0.1 to 14
		Conductivity	IS:3025 (Part 14) 1984	0.5 µS/cm to 250 µS/cm
		M-Alkalinity as CaCO <sub>3</sub>	IS:3025 (Part 23) 1986	1 mg/L to 200 mg/L
		Total Hardness as CaCO <sub>3</sub>	IS:3025(Part 21): 1983	1 mg/L to 250 mg/L
		Ca-Hardness as CaCO <sub>3</sub>	IS:3025- 1994 (RA 2003)	1 mg/L to 150 mg/L
		Mg-Hardness as CaCO <sub>3</sub>	IS:3025(Part 46): 1994 (RA 2003)	1 mg/L to 100 mg/L
		Chloride as Cl	IS :3025(Part 32):1988	1 mg/L to 50 mg/L
		Ortho Phosphate as PO <sub>4</sub>	IS:3025(Part 31):1988	0.1 mg/L to 50 mg/L
		Iron as Fe	IS:3025(Part 53):2003	0.01 mg/L to 50 mg/L
		Turbidity	IS :3025(Part 10):1984	0.2 NTU to 100 NTU
		Silica as SiO <sub>2</sub>	IS:3025(Part 35):1988 (RA 2003)	0.02 mg/L to 20 mg/L
		Free Residual Chlorine	IS:3025(Part 26):1986	0.1 mg/L to 1.0 mg/L
2.	<b>Industrial Water</b>	pH	IS:3025( Part 11) 1983	0.1 to 14
		Suspended Solids	IS:3025 Part 17- 1984	10 mg/L to 250 mg/L
		COD	IS:3025(Part 58):2006	10 mg/L to 500 mg/L
		BOD	IS:3025(Part 44):1993	10 mg/L to 250 mg/L
		DO	IS:3025(Part 44):1993	1 mg/L to 12 mg/L
		Dissolved Fluoride as F	IS:3025 (Part 60) : 2008	0.1 mg/L to 10 mg/L
		Ammonical Nitrogen as N	IS:3025-(Part 34) 1988	0.1 mg/L to 500 mg/L
		Nitrate Nitrogen as N	IS:3025(Part 34): 1988	0.1 mg/L to 100 mg/L
		Free Ammonia as N	IS:3025- 1994 (RA 2003)	0.1 mg/L to 100 mg/L
		Urea Nitrogen as N	IS:3025- 1994 (RA 2003)	0.1 mg/L to 200 mg/L
		Phosphate as P	IS:3025(Part 31):1988	0.1 mg/L to 10 mg/L