

Laboratory Indofil Industries Limited, Analytical Development Laboratory,
Off Swami Vivekananda Road, Azad Nagar, Sandoz Baug, Thane,
Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6591 (in lieu of T-1337)

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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.	PESTICIDES AND THEIR FORMULATIONS			
1.	Mancozeb			
a.	Mancozeb Technical	Appearance	IS 8707:2013.	Qualitative
		Active Ingredient	Appendix A	50% to 87%
		Zinc content	Appendix B	0.5% to 5.0%
		Manganese content	Appendix C	10% to 30%
		ETU content	CIPAC Volume F MT 162, 2009	0.005% to 2.0%
		pH (1% aq. dispersion)	CIPAC Volume J MT 75.3, 2009	3.0 to 8.0
		Wetting out time	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 11.4	0 to 150 sec
		Suspensibility (by AI)	CIPAC Volume K MT 184, 2009	50% to 100%
b.	Mancozeb 80% WP	Appearance	IS 8708:2006, Rev. 1, Reaffirmed May 2010.	Qualitative
		Active Ingredient	IS 8707:2013.	50% to 87%
		pH (1% aq. dispersion)	CIPAC Volume J MT 75.3, 2009	3.0 to 8.0
		Moisture content (Dean and Stark)	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 4.2	0.5% to 5.0%
		Suspensibility (by AI)	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 11.2	50% to 100%
		Wet sieve test	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 11.1	50% to 100 %

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		Wetting out time	IS 6940:1982, Amend. 2, Reaffirmed 2007, Rev. 1, 11.4	0 to 150 sec
		Persistent foam	CIPAC Volume F MT 47.1, 2009	0 to 150 mL
c.	Mancozeb 75% WG	Appearance	2-R&D-SP-002 (01.08.2005)	Visual
		Active Ingredient	IS 8707:2013.	50% to 87%
		pH (1% aq. dispersion)	CIPAC Volume J MT 75.3, 2009	3.0 to 8.0
		Moisture content (Dean and Stark)	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 4.2	0.5% to 5.0%
		Suspensibility (by Al)	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 11.2	50 % to 100%
		Wet sieve test	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 11.1	50% to 100%
		Wetting out time	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 11.4	0 to 150 sec
		Persistent foam	CIPAC Volume F MT 47.1, 2009	0 to 150 mL
2.	Metalaxyl			
a.	Metalaxyl technical	Appearance	IS 13458 : 1992 Reaffirmed March 2012	Qualitative
		Active Ingredient	IS 13458 : 1992 Reaffirmed March 2012	5% to 100%
		Acidity	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 13.5.4	0.01% to 2.0%

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		Moisture content (by KF)	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 4.1	0.05% to 2%
b.	Mancozeb 64% + Metalaxyl 8% WP	Appearance	IS 13692:1993 Reaffirmed March 2012	Qualitative
		AI as Mancozeb	IS 8707:2013.	50 % to 87%
		AI as Metalaxyl	IS 13458 : 1992 Reaffirmed March 2012	5% to 11%
		Suspensibility (by Gravi.)	CIPAC Volume K MT 184, 2009	50 % to 95%
		Wet sieve test	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev.1,11.1	50% to 100 %
		Wetting out time	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev.1,11.4	0 to 150 sec
		Bulk Density	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev.1,12.2	0.1 to 1.0
		pH (1% aq. dispersion)	CIPAC Volume J MT 75.3, 2009	3.0 to 8.0
		Persistent foam	CIPAC Volume F MT 47.1, 2009	0 to 150 mL
3.	Cymoxanil			
a.	Cymoxanil Technical	Appearance	IS 15600:2005, Reaffirmed May 2010	Qualitative
		Active Ingredient	IS 15600:2005, Reaffirmed May 2010	5% to 100%
		Acidity / Alkalinity	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 13.5.4	0.01% to 2.0%
		Moisture content (by KF)	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 4.1	0.05% to 2.0%

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		Material insoluble in Acetone	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 9	0.005% to 1.0%
b.	Mancozeb 64% + Cymoxanil 8%WP	Appearance	IS 15601:2005, Reaffirmed May 2010	Qualitative
		AI as Mancozeb	IS 8707:2013.	50% to 87%
		AI as Cymoxanil	IS 15600:2005, Reaffirmed May 2010	5% to 11 %
		Suspensibility (by Gravimetry)	CIPAC Volume K MT 184, 2009	50% to 95%
		Wetting out time	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev.1, 11.4	0 to 150 sec
		Bulk Density	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev.1, 12.2	0.1 to 1.0
		Wet sieve test	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev.1, 11.1	50% to 100 %
		pH (1% aq. dispersion)	CIPAC Volume J MT 75.3, 2009	3.0 to 8.0
		Persistent foam	CIPAC Volume F MT 47.1, 2009	0 to 150 mL
4.	Dodine			
a.	Dodine Technical	Appearance	IS 13784:1993 Reaffirmed March 2012	Qualitative
		Active Ingredient	IS 13784:1993 Reaffirmed March 2012	50% to 100%
		Acidity / Alkalinity	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 13.5.4	0.01% to 2.0%
		Moisture content (by KF)	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 4.1	0.05% to 2.0%

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b.	Dodine 65% WP	Appearance	IS 13785:1993, Reaffirmed March 2012	Qualitative
		Active Ingredient	IS 13784:1993 Reaffirmed March 2012	39% to 91%
		Acidity / Alkalinity	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev.1, 13.5.4	0.01% to 2.0%
		Suspensibility (by Gravi.)	CIPAC Volume K MT 184, 2009	50% to 95%
		Wet sieve test	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev.1, Rev. 1, 11.1	50% to 100 %
		Wetting out time	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev.1, 11.4	0 to 150 sec
5.	Myclobutanil			
a.	Myclobutanil Technical	Appearance	2-R&D-SP-006 (01.08.2005)	Qualitative
		Active Ingredient	2-R&D-TM-103 (09.04.2015)	5% to 100%
		Acidity / Alkalinity	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, Rev. 1, 13.5.4	0.01% to 2.0%
		Moisture content (by KF)	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 4.1	0.05% to 2.0%
b.	Myclobutanil 10% WP	Appearance	2-R&D-SP-007 (01.08.2005)	
		Active Ingredient	2-R&D-TM-103 (09.04.2015)	6% to 14%
		pH (1% aq. dispersion)	CIPAC Volume K MT 75.3, 2009	3.0 to 8.0
		Suspensibility (by Gravimetry)	CIPAC Volume K MT 184, 2009	50% to 100%

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		Bulk density	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 12.2	0.1 to 1.0
		Wet sieve test	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 11.1	50% to 100 %
6.	Oxyfluorfen			
a.	Oxyfluorfen Technical	Appearance	IS 14934:2001, Reaffirmed March 2012	Qualitative
		Active Ingredient	IS 14934:2001, Reaffirmed March 2012	5% to 100%
		Moisture content (by KF)	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 4.1	0.05% to 2.0%
		Acidity / Alkalinity	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 13.5.4	0.01% to 2.0%
b.	Oxyfluorfen 23.5% EC	Appearance	IS 14935:2001, Reaffirmed March 2012	Qualitative
		Active Ingredient	IS 14934:2001, Reaffirmed March 2012	14% to 33 %
		Acidity / Alkalinity	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 13.5.4	0.01% to 2.0%
		Emulsion Stability	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 13.3	N.A
		Cold Test	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 13.1	N.A
7.	Tricyclazole (2-R&D-SP-008)			
a.	Tricyclazole Technical	Appearance	IS 15982:2013	Qualitative

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		Active Ingredient	2-R&D-TM-169 (09.04.2015)	5% to 100%
		Acidity / Alkalinity	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 13.5.4	0.01% to 2.0%
		Moisture content (by KF)	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 4.1	0.05% to 2.0%
		Material insoluble in Acetone	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 9	0.005% to 1.0%
b.	Tricyclazole 75% WP	Appearance	2-R&D-SP-009 (04.05.2009)	Qualitative
		Active Ingredient	2-R&D-TM-169 (09.04.2015)	45% to 100 %
		Suspensibility (by Gravimetry)	CIPAC Volume K MT 184, 2009	50% to 100%
		Wetting out time	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 11.4	0 to 150 sec
8.	Hexaconazole			
a.	Hexaconazole Technical	Appearance	IS 14549:1998, Reaffirmed November 2009	Qualitative
		Active Ingredient	IS 14549:1998, Reaffirmed November 2009	5% to 100%
		Acidity / Alkalinity	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 13.5.4	0.01% to 2.0%
		Moisture content (by KF)	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 4.1	0.05% to 2.0%
		Material insoluble in Acetone	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 9	0.005% to 1.0%

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b.	Hexaconazole 5% EC	Appearance	IS 14550:1998, Reaffirmed November 2009	Visual
		Active Ingredient	IS 14549:1998, Reaffirmed November 2009	3% to 7 %
		Acidity / Alkalinity	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 13.5.4	0.01% to 2.0%
		Emulsion Stability	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 13.3	N.A
		Cold Test	ISO6940:1982, Amen.2, reaffirmed 2007, Rev1, 13.1	N.A
c.	General Tests For (1.1.1 to 1.8.2)	pH (1% aq. dispersion)	CIPAC Volume J MT 75.3, 2009	3.0 to 8.0
		Wetting out time	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 11.4	0 to 150 sec
		Suspensibility (by Al)	CIPAC Volume K MT 184, 2009	50% to 100%
		Suspensibility (by Gravi)	CIPAC Volume K MT 184, 2009	50% to 100%
		Moisture Content (by KF)	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 4.1	0.05% to 2.0%
		Moisture Content (by Dean & Stark)	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 4.2	0.5% to 5.0%
		Wet Sieve Test	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 11.1	50% to 100 % (passing)
		Persistent Foam	CIPAC MT 47.1, 2009	0 to 150 mL
		Acidity / Alkalinity	IS 6940:1982, Amend. 2,	0.01% to 2.0%

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			Reaffirmed March 2012, Rev. 1, 13.5.4	
		Material Insoluble in Acetone	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 9	0.05% to 1.0%
		Bulk Density	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 12.2	0.1 to 1.0
		Emulsion Stability	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 13.3	Qualitative
		Cold Test	IS 6940:1982, Amend. 2, Reaffirmed March 2012, Rev. 1, 13.1	Qualitative
II.	INDUSTRIAL & FINE CHEMICALS			
1.	Specialty Chemicals Used In Textile Industry	Formaldehyde content	ISO 17226-1:2008 by HPLC	20 ppm to 1000 ppm