Laboratory	**Quality Control Laboratory, Ordnance Factory Chanda, Chandrapur, Maharashtra**		
Accreditation Standard	**ISO/IEC 17025: 2005**		
Certificate Number	**TC-6936** ***(in lieu of T-0091)***	**Page 1 of 7**	
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		CHEMICAL TESTING		
I.	**EXPLOSIVES & PYROTECHNIC**			
1.	**Composition SR 372 AB**	Volatile Matter	JSS-1365-42, Appendix A	0.01 % to 1.0 %
		Bees Wax	Appendix B	0.01 % to 10.0 %
		Chlorinated Rubber		0.01 % to 10.0 %
		Strontium Nitrate		30.0 % to 50.0 %
		Shellac		1.0 % to 10.0 %
		Magnesium Powder & Magnesium Carbonate		30.0 % to 50.0 %
2.	**Composition SR 399**	Volatile Matter	IND/ME/141 (d), Appendix A	0.01 % to 1.0 %
		Magnesium Powder	Appendix B	5.0 % to 15.0 %
		Barium Peroxide		70.0 % to 90.0 %
		Acaroid Resin / Shellac		0.01 % to 5.0 %
3.	**Composition SR 524**	Volatile Matter	IND/ME/946 (Prov.) Appendix A	0.01 % to 1.0 %
		Magnesium Powder	Appendix 'B'	40.0 % to 65.0 %
		Sodium Nitrate		30.0 % to 45.0 %
		Boiled Linseed Oil		1.0 % to 6.0 %
4.	**Composition ME 412 (M)**	Volatile Matter	JSG-0112 Method 1 (a)	0.01 % to 1.0 %
		Barium Chromate	IND/ME/820 (Prov.) Appendix C	50.0 % to 80.0 %
		Antimony Sulphide		15.0 % to 25.0 %
		Potassium Perchlorate		5.0 % to 10.0 %
		NC Content		0.10 Part to 2.5 Part
5.	**Composition CU I**	Volatile Matter	IND/ME/950 (a) ProvAppendix 'A'	0.01 % to 1.0 %
		NC ½ Sec	Appendix 'B'	1.0 Part to 5.0 Part
		Red Lead	Appendix 'C'	60.0 % to 80.0 %
		Zirconium Powder	Appendix 'D'	20.0 % to 30.0 %
6.	**Composition AY**	Volatile Matter	QCL/WI/16	0.01 % to 1.0 %
		TNT		5.0 % to 15.0 %
		Paraffin Wax		1.0 % to 5.0 %

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		Barium Nitrate		30.0 % to 45.0 %
		Aluminium Powder (Light + Heavy)		25.0 % to 50.0 %
II.	**INDUSTRIAL AND FINE CHEMICALS**			
1.	**Acetic Acid**	Acetic Acid Content	IS-695, Annexure A2	80.0 % to 100.0 %
		Residue on evaporation	Annexure A4	0.01 % to 2.0 %
		Crystallization Point	Annexure A3	10.0°C to 20.0°C
		Solubility in Water	Annexure A1	Qualitative
2.	**Lead Acetate (Normal)**	Moisture Content (under vacuum over Silica Gel)	JSG-0112 Method 1(b)	5.0 % to 20.0 %
		Insoluble Matter	JSS-6810-123 Appendix A	0.10 % to 1.0 %
		Chloride as '$PbCl_2$'	JSG-0112 Method 7 (b)	0.01 % to 0.20 %
		pH	JSS-6810-123 Appendix E	1.0 to 12.0
		Salt of Alkali Metals etc. as Sulphates on 5 gm sample	JSG-0112 Method 19 or JSS-6810-123 Appendix D	0.10 % to 10.0 %
3.	**Sodium Hydroxide**	Sodium Hydroxide	IS-376, Appendix A3	80.0 % to 100.0 %
		Carbonates as 'Na_2CO_3'		0.10 % to 1.0 %
		Insoluble Matter	Appendix A16	0.01 % to 0.10 %
4.	**Barium Chromate**	Volatile Matter	JSS-1010 Appendix 1 (b)	0.10 % to 0.50 %
		Water Soluble Matter	JSS-1010 Appendix 3	0.10 % to 1.0 %
		Barium Chromate Content	IND/ME/794 (a), Appendix A	70.0 % to 100 %
		Water Soluble Chlorides as 'Cl'	JSS-1010 Appendix 7 (b)	0.01 % to 0.10 %
5.	**Resorcinol**	Moisture	IS-10744, Annexure A3	0.10 % to 1.0 %
		Sulphated Ash	Annexure A5	0.10 % to 1.0 %
		Matter Insoluble in Water	Annexure A7	0.10 % to 1.0 %
		Purity	Annexure A4	80.0 % to 100.0 %
6.	**Zinc Stearate**	Volatile Matter	JSS-6810-133	0.10 % to 1.0 %

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			Appendix A	
		pH of Aqueous Extract	Appendix B	1.0 to 12.0
		Water Soluble Matter (Total)	Appendix C	0.10 % to 2.0 %
		Water Soluble Chlorides calculated as 'NaCl'		0.01 % to 0.10 %
		Water Soluble Sulphates calculated as 'Na_2SO_4'		0.01 % to 0.25 %
7.	**Strontium Nitrate**	Moisture Content	IS-5671, Appendix A3	0.10 % to 2.0 %
		pH of Aqueous Solution	Appendix A6	1.0 to 12.0
		Matter Insoluble in Water	Appendix A4	0.01 % to 0.50 %
		Barium Compounds as $Ba(NO_3)_2$	Appendix A11	0.01 % to 5.0 %
		Strontium Nitrate Content as '$Sr(NO_3)_2$'	Appendix A14	80.0 % to 100 %
8.	**Sodium Carbonate**	Total Alkalinity as 'Na_2CO_3'	IS-296, Annexure A3	80.0 % to 100 %
		Loss on Ignition	Annexure A2	0.10 % to 5.0 %
		Matter Insoluble in Water	Annexure A4	0.01 % to 1.0 %
		Chloride as 'Cl'	Annexure A6	0.01 % to 0.50 %
		Sulphates as 'SO_4'	Annexure A5	0.01 % to 1.0 %
9.	**Barium Nitrate Gr.I**	Moisture Content	JSG 0112 Method 1 (a)	0.01 % to 2.0 %
		pH of Water Extract	JSG 0112 Method 5 (b)	1.0 to 12.0
		Barium Nitrate Content	JSS-6810-59, Appendix C	80.0 % to 100.0 %
		Matter Insoluble in Water (Total)	JSG 0112 Method 4	0.01 % to 1.0%
		Chlorides Calculated as 'NaCl'	JSG 0112 Method 7 (b)	0.01 % to 0.50 %
10.	**Potassium Chlorate Gr.I**	Moisture Content	IS-708, Annexure A4	0.01 % to 1.0 %
		pH Value	Annexure A3	1.0 to 12.0
		Insoluble Matter	Annexure A5	0.01 % to 1.0 %
		Potassium Chlorate as '$KCLO_3$'	Annexure A7	80.0 % to 100 %

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11.	**Potassium Perchlorate**	Moisture Content	JSG 0112 Method 1 (a)	0.01 % to 1.0 %
		pH of Aqueous Extract	JSG 0112 Method 5 (a)	1.0 to 12.0
		Matter Insoluble in Water	JSG 0112 Method 4	0.01 % to 0.50 %
		Chlorides as 'KCl"	JSG 0112 Method 7 (b)	0.01 % to 0.50 %
		Sulphates as 'K_2SO_4'	JSG 0112 Method 8	0.01 % to 0.50 %
		Potassium Perchlorate Content	JSS-6810-58, Appendix A	80.0 % to 100.0 %
12.	**Talk Powder**	Moisture Content	IND/ME/236, Clause 4(b)	0.10 % to 1.0 %
		Loss on Ignition	IND/ME/236, Clause 4(c)	0.10 % to 6.0 %
		Matter Insoluble in Acid	IND/ME/236, Clause 4(e)	80.0 % to 95.0 %
		Carbon Tetrachloride Soluble Matter	IND/ME/236, Clause 4(f)	0.10 % to 0.50 %
		Chlorides as NaCl	IND/ME/236, Clause 4(g)	0.01 % to 0.10 %
III.	**LAC & LAC PRODUCTS**			
1.	**APC No.2 (RD 1092K)**	Volatile matter	JSS -8030-14, Appendix C	30.0 % to 60.0 %
		Red Oxide of Iron	Appendix D	10.0 % to 20.0 %
		Drying time	IS:101 (Part -3/Sec-1) Clause 5.1	5.0 Minutes to 90.0 Minutes
2.	**APC-101(RD-1061)**	Ash Content	JSG 0112, Method No. 2(a)	40.0 % to 60.0 %
		Softening Point	IP 58/66	80.0°C to140.0°C
3.	**APC-102(RD-1064)**	Softening point	IP Standards for Petroleum & its products -Method for Analysis & Testing Part 1 Section1 , IP Method No.58/65	60.0°C to 90.0°C
4.	**APC No.224**	Total Non Volatile Matter	JSS-8010-63, Appendix A	15.0 % to 25.0 %
		Ash	Appendix B	0.001 % to 0.50 %
5.	**APC No.225**	Total Non Volatile Matter	JSS-8010-63, Appendix A	25.0 % to 35.0 %
		Ash	Appendix B	0.01 % to 0.50 %
6.	**APC No.221**	Volatile Matter	IS:197Method No.15	40.0 % to 60.0 %
		Ash Content	Method No.16	0.01 % to 2.0 %

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		Flash point	Method No.13	25.0 to 50.0°C
		Resistance to Water	IS-101:Part 7: Sec 1	Qualitative
IV.	**ADHESIVES**			
1.	**Synthetic Adhesive**	Total solid	IND/ME/788(d) Appendix G	40.0 % to 60.0 %
		Ash Content	Appendix A	0.01 % to 2.0 %
		pH of Synthetic Adhesive	Appendix B	1.0 to 12.0
		Water Soluble Chloride as 'NaCl'	Appendix E	0.01 % to 0.20 %
		Water Soluble Sulphates as 'Na_2SO_4'	Appendix F	0.01 % to 1.0 %
2.	**Paraffin Wax Special**	Ash Content	JSG-0112, Method No. 2 (a)	0.10 % to 0.20 %
		Insoluble in Petroleum Ether	JSS-9160-09, Appendix B	0.01 % to 0.10 %
		Solidifying Point	Appendix A	50.0°C to 70.0°C
V.	**PAPER & PULP**			
1.	**Paper Laminated Gr.I, Gr.II &Gr.II**	Moisture Content	IS-1060 Part-I-09	1.0 % to 10.0 %
		pH of Water Extract	IS-1060 Part I-10	1.0 % to 12.0
		Water Soluble Chlorides as 'NaCl'	IS-1060 Part II-17 or IND/ME/786 (d), Appendix. G	0.01 % to 0.10 %
		Water Soluble Sulphates as 'Na_2SO_4,	IS-1060 Part II-18	0.01 % to 0.50 %
		Ash on Incineration	IS-1060 Part I-11	0.50 % to 10.0 %
		Resistance to Water Penetration	IND/ME/786 (d), Appendix B	Qualitative

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2.	**Paper White Fine**	Moisture Content	IS-1060 Part-I-09	1.0 % to 10.0 %
		pH of Aqueous Extract	IS-1060 Part I-10	1.0 to 12.0
		Ash on Incineration	IS-1060 Part I-11	1.0 % to 10.0 %
		Water Soluble Chlorides as 'NaCl'	JSG-0114 Method No, 5	0.01 % to 0.10 %
		Water Soluble Sulphates as 'Na_2SO_4'	IS-1060 Part II-18	0.01 % to 0.50 %
3.	**Mill Board**	Moisture Content	IS-1060 Part I-9	1.0 % to 12.0 %
		pH of Water Extract	IS-1060 Part I-10	1.0 to 12.0
		Water Soluble Chlorides as 'NaCl'	IS-1060 Part II-17	0.02 % to 0.10 %
		Water Soluble Sulphates as 'Na_2SO_4,	IS-1060 Part II-18	0.01 % to 0.50 %
		Ash on Incineration	IS-1060 Part I-11	1.0 % to 15.0 %
VI.	**POLLUTION & ENVIRONMENT**			
1.	**Water Effluent**	Appearance/Colour/Odour	IS-3025 (Part 4 & 5)	Qualitative
		pH	IS-3025 (Part 11)	1.0 to 12.0
		Total Suspended Solids	IS-3025 (Part 17)	1.0 mg/L to 1000.0 mg/L
		Total Dissolved Solids	IS-3025 (Part 16)	1.0 mg/L to 2500.0 mg/L
		Dissolved Oxygen	IS-3025 (Part 38) 1	1.0 mg/L to 8.0 1.0 mg/L
		Biological Oxygen Demand	IS-3025 (Part 44)	1.0 mg/L to 150.0 mg/L
		Chemical Oxygen Demand	IS-3025 (Part 58)	1.0 mg/L to 300.0 mg/L
		Oil & Grease	IS-3025 (Part 39)	1.0 mg/L to 15.0 mg/L
		Chloride	IS-3025 (Part 32)	1.0 mg/L to 700.0 mg/L
		Sulphate	IS-3025 (Part 24)	1.0 mg/L to 1200.0 mg/L

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VII.	**TEXTILES (WOVEN & NON WOVEN)**			
1.	**Cloth Calico / Cambric**	pH of Water Extract	IS-1390	1.0 to 12.0
		Ash Content	IS-199	0.01 % to 1.0 %
		Water Soluble Chlorides as 'NaCl',	IS-5088, Appendix B1	0.01 % to 0.10 %
		Water Soluble Sulphates as 'Na_2SO_4,	IS-5088, Appendix B2	0.01 % to 0.50 %
		Ends	IS-1963	10.0 per cm to 500.0 per cm
		Picks	IS-1963	10.0 per cm to 400.0 per cm
2.	**Pressed Wool Felt**	Ash Content	IS-199	1.0 % to 10.0 %
		pH of Aqueous Extract	IS-1390	1.0 % to 12.0
		Water Soluble Matter	IS-3456	0.10 % to 5.0 %
		Chloride Content	IS-4202	0.01 % to 0.10 %
		Sulphate Content	IS-4203	0.01 % to 0.50 %
		Solvent (Benzene Methyl Alcohol) soluble Matter	IS-4390	1.0 % to 10.0 %
3.	**Tape Adhesive (W/P) Fabric**	pH of Aqueous Extract	JSG-0112 Method No. 5(b)	1.0 to 12.0
		Chlorides as 'NaCl'	JSG-0112 Method No. 7(b)	0.01 % to 0.10 %
		Sulphates as 'Na_2SO_4	JSG-0112 Method No. 8	0.01 % to 0.50 %

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