Laboratory	**Advance Fire Tec and Research Lab Private Limited, B-3 Mangolpuri, Industrial Area, Phase – II, New Delhi**		
Accreditation Standard	**ISO/IEC 17025: 2005**		
Discipline	**Chemical Testing**	**Issue Date**	**28.03.2014**
Certificate Number	**T-2900**	**Valid Until**	**27.03.2016**
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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.	**INDUSTRIAL AND FINE CHEMICALS**			
1.	**Foam Concentrates**			
a.	**Foam Concentrates for producing mechanical foam for Fire Fighting viz. AFFF, Protein Foam, Film Forming Fluoro Protein Foam & Synthetic Foam**		IS 4989 : 2006	
		Sedimentation/ Stratification	Cl. 3.1	Qualitative
		pH	Annexure A	Upto 14.00
		Sp. Gravity	Annexure B	Upto 2.00
		Miscibility with distilled & synthetic sea water	Annexure C	Qualitative
		Pour Point	Annexure D	Upto (-) 30 ^{o}C
		Sludge content	Annexure E	Upto 50 %
		Surface Tension	Annexure F	Upto 80 dyne/cm^2
		Interfacial Tension	Annexure F	Upto 80 dyne/cm^2
		Spreading Co-efficient	Annexure F	(-) 10.00 to (+) 10.00
		Viscosity	IS 1206 (Part 3) : 1978	Upto 40 cst
b.	**Multipurpose Aqueous Film Forming Foam Liquid Concentrates for Extinguishing Hydrocarbon & Polar Solvent Fires**		IS 4989 (Part 4) : 2003	
		pH	Annexure A	Upto 14.00
		Sp.Gravity	Annexure B	Upto 2.00
		Pour Point	Annexure C	Upto (-) 30 ^{o}C
		Surface Tension	Annexure D	Upto 80 dyne/cm^2
		Interfacial Tension	Annexure D	Upto 80 dyne/cm^2
		Spreading Co- efficient	Annexure D	(-)10.00 to (+) 10.00

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
c.	**Aqueous Film Forming Foam (AFFF), Protein (P), Film Forming Fluoroprotein (FFFP),Fluoroprotein (FP),for both hydrocarbon &Polar Fuel Group**		UL 162 : 1999	Qualitative
		Film Forming Test	Cl. 6	Upto 80 dyne/cm^2
		Surface Tension	Cl. 6.1 to 6.5	Upto 80 dyne/cm^2
		Interfacial Tension	Cl. 6	(-) 10.00 to (+) 10.00
		Spreading Coefficient	Cl. 6.1 to 6.5	
2.	**Dry Chemical Powder**			
a.	**Dry chemical powder for fighting B &C Class fires**		IS 4308 : 2003	
		Apparent Density	Cl. 4.2	Upto 2.00
		Chemical content	Annexure D	Upto 99 %
		Particle Size distribution	Cl. 4.4	40 mesh 100 mesh 200 mesh 325 mesh Bottom pan
		Hygroscopicity	Cl. 4.5	Upto 10 %
		Caking Test	Cl. 4.6	Qualitative
		Water repellency	Cl. 4.7	Upto 10 %
		Moisture Content	Cl. 4.8	Upto 10 %
		Heat resistance	Cl. 4.9	Qualitative

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
b.	**Dry chemical powder for fighting A B &C Class fires**		IS 14609 : 1999	
		Apparent Density	Cl. 4.2	Upto 2.00
		Chemical content	Amendment No.2	Upto 99 %
		Particle Size distribution	Cl. 4.4	100 mesh 200mesh 325 mesh
		Hygroscopicity	Cl. 4.5	Upto 10 %
		Caking Test	Cl. 4.6	Qualitative
		Water repellency	Cl. 4.7	Upto 10 %
		Moisture Content	Cl. 4.8	Upto 10 %
		Heat resistance	Cl. 4.9	Qualitative
3.	**Dry Powder for Fighting Fires in Burning metals**		IS 4861 : 1984	
		Apparent Density	Cl. 2.1	Upto 2.00
		Particle size distribution	Cl. 2.2	75 mesh 125 mesh
		Hygroscopicity & caking	Cl. 2.3	Qualitative
		Water repellency	Cl. 2.4	Upto 10 %
		Heat Test	Cl. 2.6	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
4.	**Fire Extinguishing Dry Chemical for special applications Mechanical Application Density test**		IS 14609 : 1999	
		Apparent density	Annexure A (1)	Upto 2.00
		Water Repellency Test	Annexure A (1)	Upto 50 %
		Sieve Test :	Annexure A (1)	Upto 100 %
		140 mesh		
		200 mesh		
		270 mesh		
		Elevated temperature test of Extinguishing agent	Cl. 8.2	Qualitative
		Hygroscopicity test	Cl. 9.3	Qualitative
		Packed chamber test	Cl. 10.2	Upto 100 %

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