Bitumen Emulsion (Catonic Type) – Second Revision

IS 8887 : 2004

Characteristics	Grades of Emulsion					Method of Test, Ref to	
	RS-1	RS-2	MS	SS-1	SS-2	1:No.	Annex of this standard
Residue on 600 micron IS Sieve, percent by mass, Max	0.05	0.05	0.05	0.05	0.05	-	B
Viscosity by saybolt furol viscometer, seconds:						3117	-
1) At 25 Deg. C	-	-	-	20-100	30-150		
2) At 50 Deg. C	20-100	100-300	50-300	-	-		
Coagulation of emulsion at low temperature C	Nil	Nil	Nil	Nil	Nil	-	C
Storage stability after 24 h, percent, Max	2	1	1	2	2	-	D
Particle charge	Positive	Positive	Positive	Weak Positive	Positive	-	E
Coating ability and water resistance:							
1. Coating, dry aggregate	-	-	Good	-	-	-	F
2. Coating, after spraying	-	-	Fair	-	-		
3. Coating, wet aggregate	-	-	Fair	-	-		
4. Coating, after spraying	-	-	Fair	-	-		
Stability to mixing with cement (percentage coagulation), Max	-	-	-	2	2	-	G
Miscibility with water	No co-agulation	No co-agulation	No co-agulation	-	No co-agulation		H

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	RS-1	RS-2	MS	SS-1	SS-2	1:No.	Annex of this standard
Tests on residue:							
1. Residue by evaporation, percent, Min.	60	67	65	50	60	-	J
2. Penetration 25 Deg. C/100g/5 sec	80-150	80-150	60-150	60-350	60-120	1203	-
3. Ductility 27 Deg. C/cm, Min.	50	50	50	50	50	1208	-
4. Solubility : In trichloro-ethylene, Percent by mass, Min.	98	98	98	98	98	1216	-
Distillation in percent, by volume at							
1. 190 Deg. C	-	-	-	20-55	-	-	-
2. 225 Deg. C	-	-	-	30-75	-	-	-
3. 260 Deg. C	-	-	-	40-90	-	-	-
4. 315 Deg. C	-	-	-	60-100	-	-	-
Water content, percent by mass, Max.	-	-	-	20	-	-	-

Note 1 : “This requirement shall be applicable only under situations where the ambient temperatures is below 15 Deg. C.

RS-1 : Rapid Setting – 1
RS-2 : Rapid Setting – 2
MS : Medium Setting
SS-1 : Slow Setting – 1
SS-2 : Slow Setting - 2