

Table 8
Cationic Emulsified Asphalt

Property	Test Procedure	Type-Grade											
		Rapid-Setting				Medium-Setting				Slow-Setting			
		CRS-2		CRS-2H		CMS-2		CMS-2S		CSS-1		CSS-1H	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Viscosity, Saybolt Furol 77°F, sec.	T 72	-	-	-	-	-	-	-	-	20	100	20	100
		150	400	150	400	100	300	100	300	-	-	-	-
Sieve test, %	T 59	-	0.1	-	0.1	-	0.1	-	0.1	-	0.1	-	0.1
Cement mixing, %	T 59	-	-	-	-	-	-	-	-	-	2.0	-	2.0
Coating ability and water resistance: dry aggregate/after spray	T 59	-	-	-	-	Good/Fair	Good/Fair	-	-	-	-	-	-
		-	-	-	-	Fair/Fair	Fair/Fair	-	-	-	-	-	-
Demulsibility, 35 ml of 0.8% sodium dioctyl sulfosuccinate, %	T 59	70	-	70	-	-	-	-	-	-	-	-	-
Storage stability, 1 day, %	T 59	-	1	-	1	-	1	-	1	-	1	-	1
Particle charge	T 59	Positive		Positive		Positive		Positive		Positive		Positive	
Distillation test: Residue by distillation, % by wt.	T 59	65	-	65	-	65	-	65	-	60	-	60	-
		-	0.5	-	0.5	-	7	-	5	-	0.5	-	0.5
Oil distillate, % by volume of emulsion													
Tests on residue from distillation: Penetration, 77°F, 100 g, 5 sec.	T 49	120	160	70	110	120	200	300	-	120	160	70	110
Solubility in trichloroethylene, %	T 44	97.5	-	97.5	-	97.5	-	97.5	-	97.5	-	97.5	-
Ductility, 77°F, 5 cm/min., cm	T 51	100	-	80	-	100	-	-	-	100	-	80	-

205

300.2 to 300.2

Table 10
Polymer-Modified Cationic Emulsified Asphalt

Property	Test Procedure	Type-Grade					
		Rapid-Setting				Slow-Setting	
		CRS-1P		CRS-2P		CSS-1P	
		Min	Max	Min	Max	Min	Max
Viscosity, Saybolt Furol 77°F, sec. 122°F, sec.	T 72	-	-	-	-	20	100
		50	150	150	400	-	-
Sieve test, %	T 59	-	0.1	-	0.1	-	0.1
Demulsibility, 35 ml of 0.8% sodium dioctyl sulfosuccinate, %	T 59	60	-	70	-	-	-
Storage stability, 1 day, %	T 59	-	1	-	1	-	1
Breaking index, g	Tex-542-C	-	80	-	-	-	-
Particle charge	T 59	Positive		Positive		Positive	
Distillation test: ¹	T 59	65	-	65	-	62	-
Residue by distillation, % by weight Oil distillate, % by volume of emulsion		-	3	-	0.5	-	0.5
Tests on residue from distillation:	Tex-533-C	-	-	3.0	-	3.0	-
Polymer content, wt. % (solids basis)		T 49	225	300	90	150	55
Penetration, 77°F, 100 g, 5 sec.	T 202	-	-	1,300	-	-	-
Viscosity, 140°F, poise	T 44	97.0	-	97.0	-	97.0	-
Solubility in trichloroethylene, %	T 53	-	-	-	-	135	-
Softening point, °F	T 51	-	-	-	-	70	-
Ductility, 77°F, 5 cm/min., cm	T 51	-	-	50	-	-	-
Ductility ² , 39.2°F, 5 cm/min., cm	T 51	-	-	50	-	-	-
Elastic recovery ² , 50°F, %	Tex-539-C	45	-	55	-	-	-

1. Exception to T 59: Bring the temperature on the lower thermometer slowly to 350°F ±0°F. Maintain at this temperature for 20 min. Complete total distillation in 60 ±5 min. from the first application of heat.

2. CRS-2P must meet one of either the ductility or elastic recovery requirements.

E. Specialty Emulsions. Specialty emulsions may be either asphalt-based or resin-based and must meet the requirements of Table 11.