

State: Idaho	Materials: Re: Section 702.03
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Idaho		Table 1: Requirements for Anionic Emulsified Asphalts (1)								
Property	Test Method AASHTO (T), ASTM (D), or Other	Rapid-Setting		Medium-Setting			Slow-Setting		Quick-Setting	
		RS-1	RS-2	MS-1	MS-2	MS-2h	SS-1	SS-1h	QS-1H	
EMULSIONS:										
Viscosity, Saybolt Furol seconds	25 °C (77 °F)	T59	20-100	-	20-100	-	-	20-100	20-100	20-100
	50 °C (122 °F)		-	75-400	-	100 min.	100 min.	-	-	-
Storage Stability Test, 24 hours, % (2)	1 max.								-	
Sieve Test, % (2,3)	0.10 max.								-	
Demulsibility, % (4)	60 min.		60 min.	-	-	-	-	-	-	-
Cement Mixing Test, %	-		-	-	-	-	2.0 max.	2.0 max.	-	-
Residue, %	55 min.		65 min.	55 min.	65 min.	65 min.	57 min.	57 min.	62 min.	-
DISTILLATION RESIDUE:										
Penetration, 25 °C (77 °F), tenths of mm	T49	90-150	90-150	90-250	90-250	40-90	90-250	40-90	40-90	
Ductility, 25 °C (77 °F), cm	T51	40 min.								
Ash Content, %	T111	1 max.								
NOTES:	<ol style="list-style-type: none"> 1. Refer to R5 for typical applications. 2. This test requirement on representative samples is waived if successful application of the material has been achieved in the field. 3. A maximum percentage of 0.30 is acceptable for samples taken at the point of use. 4. The demulsibility test shall be performed within 30 days from the date of shipment. Use 35 ml, 0.02 N CaCl₂ solution. 									

Idaho		Table 2: Requirements for Cationic Emulsified Asphalts (1)							
Property	Test Method AASHTO (T), ASTM (D), or Other	Rapid-Setting		Medium-Setting		Slow-Setting		Quick-Setting	
		CRS-1	CRS-2	CMS-2	CMS-2h	CSS-1	CSS-1h	CQS-1h	
EMULSIONS:									
Viscosity, Saybolt Furol seconds	25 °C (77 °F)	T59	-	-	-	-	20-100	20-100	20-100
	50 °C (122 °F)		20-100	100-400	50-450	50-450	-	-	-
Storage Stability Test, 24 hours, % (2)	1 max.							-	
Sieve Test, % (2)	0.10 max.								
Particle Charge	Positive								
Demulsibility, % (3), (4)	40 min.		40 min.	-	-	-	-	-	
Cement Mixing Test, %	-		-	-	-	2.0 max.	2.0 max.	-	
Residue, %	60 min.		65 min.	65 min.	65 min.	57 min.	57 min.	62 min.	
Oil Distillate, volume of emulsion, %	3 max.		3 max.	12 max.	12 max.	-	-	-	
pH	T200		-	-	-	-	-	-	-
DISTILLATION RESIDUE:									
Penetration, 25 °C (77 °F), tenths of mm	T49	90-150	90-150	90-250	40-90	100-250	40-90	40-90	
Ductility, 25 °C (77 °F), cm	T51	40 min.							
Ash Content, %	T111	1 max.							
NOTES:	<ol style="list-style-type: none"> 1. Refer to R5 for typical applications. 2. This test requirement on representative samples is waived if successful application of the material has been achieved in the field. 3. Use 35 ml of 0.8% sodium dioctyl sulfosuccinate solution. 4. This test requirement and associated specification limits are waived for emulsified asphalt products following dilution. 								

Idaho		Table 3: Requirements for High Float Emulsified Asphalt (1)					
Property	Test Method AASHTO (T), ASTM (D), or Other	Rapid-Setting	Medium-Setting				
		HFRS-2	HFMS-1	HFMS-2	HFMS-2h	HFMS-2s	
EMULSIONS:							
Viscosity, Saybolt Furol seconds	25 °C (77 °F)	-	20-100	-	-	-	
	50 °C (122 °F)	75-400	-	100 min.	100 min.	100 min.	
Storage Stability Test, 24 hours, % (2)	T59	1 max.					
Sieve Test, % (2,3)		0.10 max.					
Demulsibility, % (4)		50 min.	-	-	-	-	
Residue, %		63 min.	55 min.	65 min.	65 min.	65 min.	
Oil Distillate, volume of emulsion, %		-	-	-	-	1-7	
DISTILLATION RESIDUE:							
Penetration, 25 °C (77 °F), tenths of mm		T49	100-250	100-200	90-250	40-90	250 min.
Ductility, 25 °C (77 °F), cm	T51	40 min.					
Ash Content, %	T111	1 max.					
Float Test at 60 °C (140 °F), seconds	T50	1200 min.					
NOTES:	<ol style="list-style-type: none"> 1. Refer to R5 for typical applications. 2. This test requirement on representative samples is waived if successful application of the material has been achieved in the field. 3. A maximum percentage of 0.30 is acceptable for samples taken at the point of use. 4. The demulsibility test shall be performed within 30 days from the date of shipment. Use 35 ml, 0.02 N CaCl₂ solution. 						

Idaho		Table 4: Requirements for Polymer Modified Asphalt Emulsions		
Property		Test Method AASHTO (T), ASTM (D), or Other	CRS-2R (1)	CRS-2P (2)
EMULSIONS:				
Viscosity, Saybolt Furol Seconds, range	25 °C (77 °F) (6)	T59	-	-
	50 °C (122 °F) (6)		150-400	100-400
Storage Stability Test, 24 hours, % (6)			1 max.	
Sieve Test, % (6)			0.10 max.	
Particle Charge Test			Positive	
Demulsibility, % (3)			40 min.	
Residue, %			-	
Oil Distillate, volume of emulsion, %		3.0 max.	-	
Residue by Evaporation, %		65 min. (4)		
EVAPORATION/DISTILLATION RESIDUE:				
Penetration, 25 °C (77 °F), tenths of mm		T49	80-150	90-150
Ductility, cm	4 °C (39.2 °F)	T51	-	
	25 °C (77 °F)			
Elastic Recovery, % (5)		T301	-	60 min.
Ash Content, %		T111	-	1 max.
NOTES:	<ol style="list-style-type: none"> Includes asphalt cement that is blended with at least 1.5 % total rubber solids. Mill the polymer into the asphalt or emulsion during the manufacturing of the emulsion. Use 35 ml of 0.8% sodium dioctyl sulfosuccinate solution. AASHTO T59 Method B. Torsional Recovery or Elastic Recovery. The Torsional Recovery Test may be used in lieu of Elastic Recovery based on type of modifier used, at the option of the Supplier. If the Torsional Recovery method is used for acceptance, the Supplier must supply all test data verifying specification conformance. This test requirement and associated specification limits are waived for emulsified asphalt products following dilution. 			

Idaho		Table 5: Requirements for Special Tack Emulsion (STE)		
Property	Test Method AASHTO (T), ASTM (D), or Other	STE-1		
EMULSIONS:				
Viscosity, Saybolt Furol Seconds	25 °C (77 °F)	T59	30 max.	
	50 °C (122 °F)		-	
Storage Stability Test, 24 hours, %			1 max.	
Sieve, %			0.10 max.	
Particle Charge			Positive	
Demulsibility, % (1)			25 min.	
Residue, %			45 min.	
Oil Distillate, volume of emulsion, %			5.0 max.	
DISTILLATION RESIDUE:				
Penetration, 25 °C (77 °F), tenths of mm			T49	100-200
Ductility, 25 °C (77 °F), cm		T51	40 min.	
Solubility in trichloroethylene, %		T44	97.5 min.	
NOTES:		1. Perform the Demulsibility Test within 30 days from date of shipment.		

Idaho		Table 6: Emulsified Asphalt for Fog Coat	
Property		Test Method AASHTO (T), ASTM (D), or Other	
EMULSIONS:			
Viscosity, Saybolt Furol seconds	25 °C (77 °F)	T59	30-150
	50 °C (122 °F)		-
Storage Stability Test, 24 hours, %			1 max.
Sieve Test, %			0.10 max.
Particle Charge			Positive
Demulsibility, % (1)			40 min.
Residue, %			65 min.
Oil Distillate, volume of emulsion, %			0.5 max.
DISTILLATION RESIDUE:			
Penetration, 25 °C (77 °F), 100g, 5 sec, tenths of mm		T49	15-50
Softening Point, C (F)		T53	57 (135) min.
NOTES:		1. Perform the Demulsibility Test within 30 days from date of shipment.	