State	West Virginia	**Materials:**	Re: Section 705 Asphalt Materials
Date	01/28/2026	**Web Address:**	https://transportation.wv.gov/highways/TechnicalSupport/specifications/Pages/default.aspx
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West Virginia (1,2)		**Table 1: Requirements for Anionic Emulsified Asphalts (2.)**					
Property		**Test Method, AASHTO (T), ASTM (D), or Other**	**Rapid Setting**		**Medium Setting**		**Slow Setting**
			RS-2	**HFRS-2**	**MS-2**	**HFMS-2**	**SS-1h**
Tests on Emulsified Asphalt:							
Viscosity, Saybolt Furol	25 °C, sec	T59	-	-		-	20 - 100
	50 °C, sec		75-400	75-400	100 min.	100 min.,	-
Viscosity, Rotational Paddle	25 °C, mPa·s	T382					40 - 200
	50 °C, mPa·s		75 - 400	75 - 400	200 min.	200 min.	
Storage Stability Test, 24 hour, % Difference max.		T59	1.0	1.0	1.0	1.0	1.0
Demulsibility,	35 ml 0.02 N CACl2, %, min	T59	60	50		-	-
Sieve Test, % max		T59	0.10	0.10	0.10	0.10	0.10
Distillation to 260°C, % by weight		T59					
Residue, % min			65	65	65	65	57
Tests on Residue from Distillation							
Penetration, 25 ºC, 100 g, 5 sec, dmm,		T49	100-200	100-200	90-250	90-250	40-90
Float Test, sec	60 °C, min	T50	-	1200		1200	-
Ductility, 25 ºC, cm, min		T51	60	60	40	40	40
Ash Content, % max		T111	1.0	1.0	1.0	1.0	1.0
Notes		1. **Emulsions identified in this datasheet are either a.) referenced in 2023 WVDOT Construction Specifications, b.) appear on the WVDOH approved materials list, or c.) appear on the statewide materials bid** 2. **Non-tracking emulsions are required to meet the requirements of 705.13 Nonstandard Asphalt Materials** 3. **Section 705.4 Anionic emulsified asphalts shall conform to the requirements of AASHTO M-140**					

West Virginia		Table 1: Requirements for Cationic Emulsified Asphalts (1,)				
Property		**Test Method, AASHTO (T), ASTM (D), or Other**	**Rapid Setting**	**Medium Setting**	**Slow Setting**	
			CRS-2	**CMS-2**	**CSS-1h**	**CSS-1**
Tests on Emulsified Asphalt:						
Viscosity, Saybolt Furol	25 °C, sec	T 59			20 -100	20 - 100
	50 °C, sec		100-400	50 - 450		
Viscosity, Rotational Paddle	25 °C, mPa·s	T 382			40 - 200	40 - 200
	50 °C, mPa·s		200 - 800	50 - 450		
Storage Stability Test, 24 hour, % Difference max.		T59	1.0	1.0	1.0	1.0
Demulsibility, (3) %, min		T59	40		-	
Particle Charge		T59	Positive	Positive	Positive	Positive
Sieve Test, % max		T59	0.10	0.10	0.10	0.10
Distillation:		T59				
Oil Distillate, volume of emulsion, % max			3	12		
Residue,% min			65	65	57	57
Tests on Residue from Distillation						
Penetration, 25 ºC, 100 g, 5 sec, dmm,		T49	90 -150	90 - 250	40-90	90 - 250
Ductility, 25 ºC , cm, min		T51	40	40	40	40
Ash Content, % max		T111	1	1	1	1
Notes		**1. Section 705.11 Cationic emulsified asphalts shall conform to the requirements of AASHTO M 208** **2. Use 35 mL of 0.08% Sodium Dioctyl Sulfosucinate**				

West Virginia		Table 1: Requirements for Polymer Modified Emulsified Asphalt (1)				
Property		**Test Method, AASHTO (T), ASTM (D), or Other**	**Rapid Setting**		**Quick Setting**	
			CRS-2P	**HFRS-2P**	**CQS 1hP**	**CQS 1P**
Tests on Emulsified Asphalt:						
Viscosity, Saybolt Furol	25 °C, sec	T 59			20 - 100	20 - 100
	50 °C, sec		100 - 400	75 - 400		
Viscosity, Rotational Paddle	25 °C, mPa·s	T 382			40 - 200	40 - 200
	50 °C, mPa·s		200 - 800	150 - 800		
Storage Stability Test, 24 hour, % Difference max.		T59	1	1		
Demulsibility, (2) %, min		T59	40 (2)	40 (3)		
Particle Charge		T59	Positive		Positive	Positive
Sieve Test, % max		T59	0.10	0.10	0.10	0.10
Distillation:		T59				
Oil Distillate, volume of emulsion, % max						
Residue,% min			65	65	62	62
Tests on Residue from Distillation						
Penetration, 25 ºC, 100 g, 5 sec, dmm,		T49	90-150	100 - 200	40 - 90	90 - 200
Elastic Recovery, (4.), % min		T51	60	60	50	60
Float Test, sec	60 °C, min	T50		1200		
Softening Point, ºF, min		T53			135	128
Ash Content, % max		T111	1	1	1	1
Notes		**1. Section 705.12 Polymer modified emulsified asphalt shall conform to the requirements of AASHTO M 316 2. Use 35 mL of 0.08% Sodium Dioctyl Sulfosucinate 3. Use 35 mL of 0.02 N $CaCl_2$ 4. Straight Sided, 5 cm/min, 20 cm elongation, 5 min. hold**				