

Emulsion Type:	RS-1h				RS-1				RS-1s				RS-2h				RS-2				RS-2s				HFRS-2			
Emulsion Specification:	M140				M140		D977		M140				M140		D977		M140		D977		M140				M140		D977	
Tests on emulsified asphalt:	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Viscosity, Saybolt Furol at 25°C (77°F), s	20	100			20	100	20	100	20	100																		
Viscosity, Rotational Paddle at 25°C (77°F), cPs	40	200			40	200	45	220	40	200																		
Viscosity, Saybolt Furol at 50°C (122°F), s																												
Viscosity, Rotational Paddle at 50°C (122°F), cPs													75	400			75	400	75	400	75	400			75	400	75	400
													150	800			150	800	165	880	150	800			150	800	165	880
Storage stability test, 24 h		1				1		1		1				1			1		1		1					1		1
Demulsibility, 35 mL, 0.02 N CaCl2, %	60				60		60		60				60				60		60		60				50		60	50
Sieve test, %		0.10				0.10		0.10		0.10				0.10			0.10		0.10		0.10				0.10		0.10	0.10
Residue by distillation, %	55				55		55		55				65				65		63	65	65				65		63	65
Tests on residue from distillation:	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Penetration, 25°C (77°F), 100 g, 5 s, 0.1 mm	40	90			90	150	100	200	150	250			40	90			90	150	100	200	150	250			100	250	100	200
Ductility, 25°C (77°F), 5 cm/min, cm	40				40		40		40				40				40		40		40				40		40	
Ash content, %		1.0				1.0		1.0		1.0				1.0				1.0		1.0		1.0				1.0		1.0
Solubility, %							97.5											97.5									97.5	
Float test, 60°C (140°F), s																										1200		1200

Emulsion Type:	MS-1				MS-2				MS-2h				HFMS-1				HFMS-2				HFMS-2h				HFMS-2s							
Emulsion Specification:	M140		D977		M140		D977		M140		D977		M140		D977		M140		D977		M140		D977		M140		D977					
Tests on emulsified asphalt:	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Viscosity, Saybolt Furol at 25°C (77°F), s	20	100	20	100			100				100		20	100	20	100			100				100		20	100	20	100			100	
Viscosity, Rotational Paddle at 25°C (77°F), cPs	40 45	200 220	45	220			220				220		40 45	200 220	45	220			220				220		40 45	200 220	45	220			220	
Viscosity, Saybolt Furol at 50°C (122°F), s					100		100		100		100						100		100		100		100		100		100		100		100	
Viscosity, Rotational Paddle at 50°C (122°F), cPs					200 220		220		200 220		220						200 220		220		200 220		220		200 220		220		200 220		220	
Storage stability test, 24 h		1		1		1		1		1		1		1		1		1		1		1		1		1		1		1		1
Sieve test, %		0.10		0.10		0.10		0.10		0.10		0.10		0.10		0.10		0.10		0.10		0.10		0.10		0.10		0.10		0.10		0.10
Oil Distillate, by volume of emulsified asphalt, %																													1	7	1	7
Residue by distillation, %	55		55		65		65		65		65		55		55		65		65		65		65		65		65		65		65	
Tests on residue from distillation:	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Penetration, 25°C (77°F), 100 g, 5 s, 0.1 mm	90	250	100 90	200	90	250	100 90	200	40	90	40	90	90	250	100 90	200	90	250	100 90	200	40	90	40	90	90	250	100 90	200	40	90	40	90
Ductility, 25°C (77°F), 5 cm/min, cm	40		40		40		40		40		40		40		40		40		40		40		40		40		40		40		40	
Ash content, %		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0
Solubility, %			97.5				97.5				97.5				97.5				97.5				97.5				97.5				97.5	
Float test, 60°C (140°F), s													1200		1200		1200		1200		1200		1200		1200		1200		1200		1200	

Emulsion Type:	SS-1h				SS-1				QS-1h			
Emulsion Specification:	M140				M140		D977				D977	
Tests on emulsified asphalt:	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Viscosity, Saybolt Furol at 25°C (77°F), s	20	100	20	100	20	100	20	100			20	100
Viscosity, Rotational Paddle at 25°C (77°F), cPs	40 45	200 220	45	220	40 45	200 220	45	220			45	220
Storage stability test, 24 h		1		1		1		1				
Sieve test, %		0.10		0.10		0.10		0.10				0.10
Cement mixing test, %		2.0		2.0		2.0		2.0				
Residue by distillation, %	57		57		57		57				57	
Tests on residue from distillation:	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Penetration, 25°C (77°F), 100 g, 5 s, 0.1 mm	40	90	40	90	90	250	100 90	200			40	90
Ductility, 25°C (77°F), 5 cm/min, cm	40		40		40		40				40	
Ash content, %		1.0		1.0		1.0		1.0				1.0
Solubility, %			97.5				97.5				97.5	

Emulsion Type:	CRS-1h				CRS-1				CRS-1s				CRS-2h				CRS-2				CRS-2s			
Emulsion Specification:	M208				M208		D2397		M208				M208				M208		D2397		M208			
Tests on emulsified asphalt:	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Viscosity, Saybolt Furol at 50°C (122°F), s	20	100			20	100	20	100	20	100			100	400			100	400	100	400	100	400		
Viscosity, Rotational Paddle at 50°C (122°F), cPs	40	200			40	200	45	220	40	200			200	800			200	800	220	880	200	800		
Storage stability test, 24 h		1				1		1		1				1				1		1		1		
Demulsibility, 35 mL, 0.08% dioctyl sulfosuccinate, %	40				40		40		40				40				40		40		40			
Particle charge test	Positive				Positive		Positive		Positive				Positive				Positive		Positive		Positive			
Sieve test, %		0.10				0.10		0.10		0.10				0.10				0.10		0.10		0.10		
Oil Distillate, by volume of emulsified asphalt, %		3				3		3		3				3				3		3		3		
Residue by distillation, %	60				60		60		60				65				65		65		65			
Tests on residue from distillation:	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Penetration, 25°C (77°F), 100 g, 5 s, 0.1 mm	40	90			90	150	100	250	150	250			40	90			90	150	100	250	150	250		
Ductility, 25°C (77°F), 5 cm/min, cm	40				40		40		40				40				40		40		40			
Solubility, %							97.5												97.5					
Ash content, %		1.0				1.0		1.0		1.0				1.0				1.0		1.0		1.0		

