

TOPEIN®C ROAD REJUVENATOR/RAP BINDER SPECIFICATIONS

TOPEIN®C shall be a water based dispersion of a homogeneous mixture of tall oil pitch, asphaltene resin and petroleum asphalt. TOPEIN®C shall not contain added gas oil, lube oil or lube oil extract. TOPEIN®C, when applied properly during normal summer conditions, shall cure and allow controlled traffic without tracking. TOPEIN®C, under normal conditions, shall not require sanding. The supplier shall supply with each load of TOPEIN®C a Certificate of Compliance certifying that the R/S meets the following specification.

Tests on Concentrated Dispersion:

<u>Test Description</u>	<u>Test Method</u>	<u>Limits</u>	
		<u>Min</u>	<u>Max</u>
Viscosity at 25 C (77 F), SSF	AASHTO T-59	16	80
Sieve, %	AASHTO T-59		0.01
5 Day Settlement, %	AASHTO T-59		5.0
Particle charge	AASHTO T-59	Positive	
pH (used if particle charge test is inconclusive)	AASHTO T-59	2.0	7.0
Residue, %	AASHTO T-59	51	

Tests on Recovered Residue:

Viscosity at 135 C (275 F), cSt	ASTM D4402	475	1500
Flash point, COC, C	AASHTO T-48	232	
Solubility in TCE	AASHTO T-44	97.5	
Specific Gravity (1- Water)	AASHTO T-228	0.98	
Asphaltenes, %	ASTM D2007 mod	20	40
Polar Compounds, %	ASTM D2007 mod	30	
Aromatics, %	ASTM D2007 mod	15	
Saturates, %	ASTM D2007 mod		10

Tests on TOPEIN®C ready to shoot, 1:1 dilute:

Residue, % (1:1)	AASHTO T-59	26	
Pumping Stability	Note 1	pass	

Note 1: Pumping stability is tested by pumping 475 ml of dilute emulsion, at 25 C (77 F), through a 1/4 inch gear pump operating at 1750 rpm for 10 minutes without significant coagulation or separation of bitumen and water.