

CQS-1h Product Data Sheet

Description and Physical Properties

CQS-1h is a cationic emulsion for use with quick-setting slurry seals. A specially designed application machine mixes the emulsion, aggregate, water and additives and also places the resulting mixture. The Emulsion can also be used as a tack coat (either as is or diluted 50% with water) or fog seal (diluted 50% with water) and applied with a distributor.

Physical Properties

- Boiling Point—Approximately 100°C (212°F)
- Percent Volatiles—None
- Appearance—Brown Liquid
- Flammability—Non-flammable (liquid)
- Weight Per Gallon—8.4 lbs
- Solubility in Water—Dispersible
- Odor—Mild Petroleum Odor

Specifications for CQS-1h

The specification conforms to AASHTO M208, ASTM D2397, the Virginia Department of Transportation, North Carolina DOT, South Carolina DOT, Tennessee DOT, West Virginia DOT and Maryland State Highway Administration.

Property		Test Procedure (AASHTO)	Specification	
			Min	Max
Viscosity, Saybolt-Furol, 25°C (77°F), sec		T59, T72	20	100
Sieve Test, %		T59	—	0.1
Particle Charge		T59	Positive	
Slurry Seal Quick-Set Test		VTM 89 ¹	Pass A&B	
Distillation Test	Residue by distillation, % by weight	T59	57	—
	Oil Distillate, % by volume		—	3
Tests on Residue from Distillation	Penetration, 25°C (77°F), 100 g, 5 sec	T49, T59	40	90
	Ductility, 25°C (77°F), 5 cm/min, cm	T51, T49	40	—

¹VTM=Virginia Test Method

Handling

Protect the emulsion from freezing.
 Avoid overheating the emulsion.
 Avoid excessive pumping with high shear pumps, especially if the emulsion is cool.

Storage and Application

Grade	Recommended Maximum Storage Temperature, °F	Application Temperatures (°F)	
		Recommended Range	Maximum Allowable
CQS-1h	140	50-130	175

Transport

Regulatory Information	UN Number	Proper Shipping Name	Class	PG	Label
USDOT					Not Regulated



Asphalt Emulsion Industries, LLC
 Quality Emulsion for Every Application

Asphalt Emulsion Industries, LLC • P. O. Box 38128 • Henrico, VA 23231 • 804.264.2425
 Fax 804.264.0219 • Toll Free 877.806.4429
www.asphalt-emulsion.com

Revised 02.2013