

BS group Bitumen Emulsion CQS-1h

Cationic Bitumen Emulsion Quick Setting



Introduction

BS group Bitumen Emulsion CQS-1h is a cationic asphalt emulsion designed for use in slurry seals and micro-surfacing projects. BS group asphalt emulsions CQS-1h has minimum 62% bitumen and it is in chocolate brown in color and is a free flowing liquid at ambient temperature.

The slurry seal process mixes the emulsion, aggregate and additives in a specially designed machine, which also places the mixture. The cationic emulsion is a chemically stabilized system, so care should be taken not to upset the chemical balance with contamination by chemicals, over-exposure to air, or adverse mechanical or thermal conditions.

Typical properties of CQS-1h

BS group asphalt emulsion CQS-1h is manufactured strictly as per ASTM D2397-13 AASHTO M208-16.

Property	Min	Max	Test Method
Viscosity, Saybolt Furol at 25°C, SFS	20	150	ASTM D7496 AASHTO T 72
Storage stability test, 24-h, %	-	1	ASTM D6930 AASHTO T59
Coating ability and water resistance:			
Coating, dry aggregate	Good		ASTM D244
Coating, after spraying	Fair		ASTM D244
Coating, wet aggregate	Fair		ASTM D244
Coating, after spraying	Fair		ASTM D244
Particle charge test	positive	positive	ASTM D244 AASHTO T59
Sieve test, %	-	0.1	ASTM D6933 AASHTO T59
Distillation:			
Residue, %	62	-	ASTM D6997 AASHTO T59
Tests on residue from distillation test:			
Penetration, 25°C (77°F), 100g, 5s, dmm	60	90	ASTM D5 AASHTO T49
Ductility, 25°C (77°F), 5cm/min, cm	40	-	ASTM D113 AASHTO T51
Solubility in trichloroethylene, %	97.5	-	ASTM D2042 AASHTO T44



Advantages

At the following you can find some advantages of this product:

- No heating required thus eco-friendly
- Cost and energy efficient
- Easy and even mixing
- Low temperature curing
- Minimum preparation time for surface repair
- High adhesive properties
- Firm patch
- Resistant to stripping of water
- Bonds well with cool, damp surfaces.

Applications

BS group Bitumen Emulsion CQS-1h is recommended to be used for micro surfacing applications, and are tailor made as per design and quality of site aggregates. Also, CQS-1h use in slurry mixtures for slurry paving project and ready slurry mix in drum.

Asphalt Emulsion CQS-1h is a Latex Modified Emulsion and can also be used for Crack Seal / Fog Seal applications.

Recommended rate of application

Typical rate of application of BS group Bitumen Emulsion CQS-1h for micro-surfacing and slurry seal is between 8 -10 % by weight of aggregates.

To ensure best results

- Use without diluting Bitumen Emulsion with any solvent or water
- Use at ambient temperature
- Roll the Bitumen Emulsion drums 5 times before using

Handling and safety

- Contains petroleum distillate; flammable: keep away from open fire, sparks or other ignition sources; wear protective clothing, gloves and goggles.
- Fire flammable when wet, flash point 40°C.
- Skin –avoid repeated or prolonged contact, if occurs remove with hand cleaner that removes oil or grease, then clean with soap and water.
- Eyes contact could cause irritation, if contact occurs flush immediately with clean water
Inhalation can cause dizziness, move immediately in fresh air if dizzy and if breathing difficulty persists administer oxygen.



Cleaning

Tools: Clean with kerosene.

Hands: Use a hand cleanser or kerosene followed by soap and water.

Availability

BS group asphalt emulsion CQS-1h is available in:

- Bulk
- IBC Tank, Flexi Tank
- Reconditioned steel drums 220 lit., Net Weight: 200 ± 3 Kg
- New steel drums 220 lit., Net Weight: 200 ± 3 Kg

Production Standard

ASTM D2397-13

AASHTO M208-16