

RoadChem™ 501 Mixing Grade/CSS Slurry

VSS ASPHALT TECHNOLOGIES DATA SHEET VER: 1.0 --PRODUCT INFORMATION



DESCRIPTION:

RoadChem™ 501® is a cationic emulsifier for the manufacture of asphalt emulsions for cold mixes and slow set slurry. RoadChem™ 501® is designed to have a wider range of compatibility with aggregates, and is particularly suited to aggregates that have adhesion problems. The emulsifier provides extended mixing times to ensure coating and adhesion.

BENEFITS:

- Stability
- Easy to handle and transport
- Wide range of compatibility with aggregates
- Extended mixing times to ensure coating and adhesion

PHYSICAL PROPERTIES:

Pour Point: (C) -9

Flash Point (Closed Cup): (C) > 100

Appearance: Liquid

SG: 25C 1.11 kg/lit.

Viscosity cps 60C: 230

Boiling Point (C): 110C

Storage Life: min 12 months in drums or bulk. (20-50C in covered area in sealed drums).

APPLICATION:

Emulsion Manufacture:

RoadChem™ 501® should be kept at 30C or higher prior to use for pumping. It should not be stored at above 60C.

RoadChem™ 501® can be easily neutralized with hydrochloric acid (concentrated). It is good practice to acidify the water before addition of RoadChem™ 501®.

RoadChem™ 501® may be used with a range of different polymer modification including Neoprene. SBR. EVA. EMA and SBS.

TYPICAL FORMULATION:

All formulations should be tested in the laboratory before use

Slurry Seal Slow Set:

Asphalt: 62-63%

Soap (based on total emulsion by weight)

RoadChem™ 501®: 1.2-1.80%

Concentrated HCl (pure): to pH 1.5-2.8

Water to 100%

Cold Mix Emulsion:

Asphalt: 60-65%

Soap (based on total emulsion by weight).

RoadChem™ 501®: 1.2-1.5%

Concentrated HCl (pure) to pH 1.5-1.8

NOTES:

Note that RoadChem™ 501® should be added to warm water that has already had the acid added to it. The emulsifier buffers the solution so mix for at least 20 minutes before testing pH.

Note also that slurry and microsurfacing emulsions must be designed relatively to the mixture. That is a full ISSA mixture design must be done to verify performance.

Notes:

1. **RoadChem™ 501®** may be blended with **RoadChem™ 500®** to improve adhesion and extend mixing times of **RoadChem™ 500®** cold mix emulsions.
2. **RoadChem™ 501®**: may be used with a wide range of retarders including aluminum sulfate, ammonium chloride, JP4, borax, and may be used in the prewet water in a neutralized solution of 5% as a retarder.
3. **RoadChem™ 501®** neutralizes easily. The ratio of HCl: **RoadChem™ 501®**: to achieve required pH is about 0.4.
4. Latex should be co-milled into the emulsion for the best dispersion, emulsion stability and control of the final properties of the slurry. Latex may be post added or added into the soap if no co milling is not available.

SAFETY:

Contains alkaline corrosive materials. Will cause eye and skin irritation if significant contact is made. Use goggles and protective clothing when handling. Refer to the MSDS for further information.

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