
STE 1 (SPECIAL TACK EMULSION)

Description:

STE-1 is a low asphalt residue cationic type emulsified asphalt formulated for tack coating when asphalt paving and patching is being done.

STE-1 meets the current specification requirements for the Washington State Department of Transportation.

Advantages:

STE-1 provides the following advantages for tack coating:

1. Does not require dilution with water as is recommended with slow setting emulsions, such as CSS-1.
2. Quicker breaking than slow setting emulsions resulting in shorter delays when asphalt paving and patching.

Storage /Handling:

Personnel must be trained in the proper handling of STE-1 and provided the information contained in the Material Safety Data Sheet (MSDS).

As with other emulsified asphalts, STE-1 must not be stored at elevated temperatures, which increases the evaporation of water causing a thickening/viscosity increase or allowed to freeze which will cause breakage. STE-1 must be in storage tanks with either hot water or low density electric heating and must be maintained at a storage temperature of 38°C to 54°C (100°F to 130°F). Like all emulsions, this product cannot be stored in just any tank; the tank must be clean and free of water and contaminants.

STE-1 is to be used directly. It is not to be diluted with water.

Tank storage of up to three months has been reported for STE-1. The tank must be circulated or mixed once weekly to assure product uniformity.

Other emulsions, even CSS type, must NOT be mixed with STE-1. The distributor spraybar, asphalt pump, and the lines must be flushed thoroughly shortly after completion of work to prevent possible pump seizing and plugged nozzles (using proper safety and environmental procedure). Please note: You must not mix other asphalt emulsion suppliers' products with U.S. Oil and Refining Co. products.

Usage:

STE-1 is applied for tack coating using conventional asphalt distributors having the following nozzles (based on recommendations from equipment manufacturers).

<u>Distributors Type</u>	<u>Nozzle Size</u>
Bearcat	No. 1
Etnyre	1/16" Coin Slot
Rosco	No. 0

To obtain the best results, the minimum application temperature for STE-1 must be 27°C (80°F).

As for all tack coating, the STE-1 emulsion must be broken (from brown to black color, this is a judgment call) prior to spreading asphalt mixtures. This insures proper bonding.

Additional Information:

For additional information on STE-1, contact the Asphalt Division of U.S. Oil & Refining Co., 3001 Marshall Avenue, Tacoma, Washington, 98421, Telephone: 253-383-1651 and Fax: 253-572-1717

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