# U.S. OIL & REFINING CO.

TACOMA, WASHINGTON

# **EMULSIFIED ASPHALT, CSS-1**

# **Description:**

CSS-1 is a cationic slow setting type emulsified asphalt.

CSS-1 from U.S. Oil & Refining Co. meets the current specification requirements of the Washington State Department of Transportation.

### **Storage / Handling:**

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

The recommended storage temperature of CSS-1 is 38°C to 60°C (100°F to 140°F).

The storage tank must be insulated and have either hot water or low density electric heating. The tank must be circulated or mixed weekly to assure product uniformity.

Other emulsions, including CSS-1 type from other asphalt suppliers, must NOT be mixed with these U.S. Oil products. Asphalt pumps, spraybars and lines of mixing and spraying equipment must be flushed thoroughly shortly after completion of work to prevent possible pump seizing and plugged valves, meters and nozzles (using proper safety and environmental procedures).

## **Usage:**

CSS-1 diluted with water is used for the spray applications of tack coating and fog sealing. The diluted emulsion is applied using conventional asphalt distributors with the following nozzles recommended (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

The rate of emulsion application for a fog seal is dependent on the degree of emulsion absorption into existing surface and the texture of the existing surface. Caution must be exercised in preventing over-application of a fog seal as slippery, hazardous conditions will result.

CSS-1 could be used in base stabilization.	

harddrive:Desktop Folder:TechBul Folder:Emulsions:CSS-1.doc

#### **Additional Information:**

For additional information on CSS-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

#### **Disclaimer of Implied Warranties:**

U.S. Oil & Refining Co. makes no warranty that the asphalt material discussed in this product bulletin is merchantable or fit for any particular purpose, and there are no warranties, expressed or implied, which extend beyond this product bulletin.

#### **Disclaimer of Expressed Warranties:**

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