

---

## **EMULSIFIED ASPHALT, CRS-2**

---

### **Description:**

CRS-2 is a cationic rapid setting type emulsified asphalt. This emulsion is used primarily for the construction of bituminous surface treatments (chip seals).

CRS-2 from U.S. Oil & Refining Co. is manufactured to meet current Federal, Washington State Department of Transportation and other specifications.

---

### **Storage /Handling:**

Personnel must be trained in the proper handling of CRS-2 and provided the information contained in the Material Safety Data Sheet (MSDS).

CRS-2 must be stored at the temperature from 66°C to 82°C (150°F to 180°F) with the storage tank being insulated and having either hot water or low density electric heating. The tank must be circulated or mixed twice weekly to assure product uniformity.

Other emulsions, including CRS-2 type from other asphalt suppliers, must NOT be mixed with U.S. Oil CRS-2. This emulsion must not be diluted with water. The distributor spraybar, asphalt pump and lines must be flushed thoroughly shortly after completion of work to prevent possible pump seizing and plugged nozzles (using proper safety and environmental procedures).

---

### **Usage:**

CRS-2 is applied using conventional asphalt distributors have the following nozzles (based on recommendations from equipment manufacturers).

<u>Distributor Type</u>	<u>Nozzle</u> Application <u>Range, Gal./Yd</u>	<u>Nozzle Size</u>
Bearcar	0.20-0.45	No. 2
	0.25-0.60	No. 3
	0.35-0.95	No. 4
Etnyre	0.20-0.55	V-Slot, #3352205
	0.35-0.55	V-Slot, #3352204

Rosco	0.25-0.55	No. 1
	0.40-0.85	No. 2

The best results are obtained when the application temperature is from 66°C to 77°C (140°F to 170°F).

A crushed aggregate with good durability and cleanliness must be used when chip sealing with CRS-2 emulsion (less than 2 percent passing the No. 200 sieve by washed gradation).

CRS-2 also is used for tack coat for open-graded hot mix asphalt surface courses such as Washington State Department of Transportation Class D mix.

---

### **Additional Information:**

For additional information on CRS-2, 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:**

Any affirmation of fact or promise contained in this product bulletin shall not be deemed to create an expressed warranty that the asphalt described shall conform to the affirmation or promise. Any description of the asphalt is for the sole purpose of identification and shall not be deemed to create an expressed warranty that the asphalt shall conform to the description. Any sample or model is for illustrative purpose only and shall not be deemed to create an expressed warranty that the whole of the goods shall conform to the sample or model. No affirmation, promise, description, sample or model shall be deemed part of the basis of the bargain of any sale with U.S. Oil & Refining Co.