

CRS-2M

Cationic Polymer Modified Rapid Setting Chip Seal Emulsion

DESCRIPTION

CRS-2M is a cationic polymer modified rapid set asphalt emulsion of moderate to high viscosity used for chip seal and SAMI pavement preservation applications.

CRS-2M employs both a chemical and thermal water breaking mechanism that allows for quick sweeping and return to traffic*.

CRS-2M adheres well to most aggregates because the majority of them are negatively charged**. **CRS-2M** provides superior stone retention in shaded or otherwise challenging applications*.

*Weather, aggregate, and application conditions can play a factor in sweeping, return to traffic time, and chip retention.

**Large quantities of fines or P-200's (> 2 - 3%) on the aggregate can reduce adhesion.

FEATURES/BENEFITS

- Rapid breaking
- Polymer modification
- Works well with most aggregates
- Superior chip retention
- Provides water resistant seal

APPLICATION

Recommended application conditions of **CRS-2M** are 55° F and rising with roadbed temperatures of 55° F to 130° F. Do not apply in foggy or rainy weather. Chip retention can be compromised if placed after August in northern states' climates. **CRS-2M** should be applied at the recommended rates; however, variances must be made for the size and gradation of the aggregate (Typical aggregates for single layer chip seals range from 1⁄4" to 3/8") and the absorption characteristics of the pavement being treated. Surfaces should be clean, swept, and dry before application of the **CRS-2M** binder. The chips must be placed before a significant portion of the emulsion has started to break.

SPECIFICATIONS – TECHNICAL DATA

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| Emulsion Tests | Specification | <u>Typical</u> <u>Results</u> |
| Viscosity, SFS @ 50°C, sec | 75 – 300 | 200 |
| Sieve, % | < 0.10 | <0.05 |
| Residue by distillation, % | <u>></u> 65.0 | 68.0 +/-1 |
| Pen, dmm | 80 – 150 | 110 |
| Demulsibilty, % | <u>></u> 50.0 | 60 - 90 |
| Elastic Recovery @10°C, % Toughness and Tenacity, | <u>></u> 60.0 | 65 - 75 |
| 25°C, Nm, | <u>></u> 4.5/3.5 | <u>></u> 6.5/5.75 |

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Product Handling Guidelines

CRS-2M

- Emulsion must <u>not</u> be blended with other emulsions.
- Direct contact heat should only be done when absolutely necessary. This should be done sporadically and with recirculation or agitation if possible. Note: Emulsion which directly contacts any heat source above 210°F will experience break and separation.
- Contact your technical representative for instructions regarding storage and handling of rapid set polymer modified emulsions.
- Emulsion separation will occur if frozen or boiled.

APPLICATION RECOMMENDATIONS

CRS-2M should be applied between 0.39 and 0.46 gallons/SY depending on the texture, porosity etc. of the surface and at emulsion temperatures $170^{\circ} - 190^{\circ}F$ (77° - 88°C).



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