

# SAM-CE

Stress Absorbing Membrane Cationic Polymer Modified Emulsion

## DESCRIPTION

**SAM-CE** is a cationic polymer modified rapid set asphalt emulsion of moderate to high viscosity SAMI pavement preservation applications. It is specially designed to resist tracking, flushing, and stone loss in relatively higher temperature climates and extreme ADT conditions. It provides an excellent membrane that enhances placement and compaction of HMA surface courses.

**SAM-CE** employs both a chemical and thermal water breaking mechanism that allows for quick sweeping and return to traffic or placement of surface course\*.

**SAM-CE** adheres well to most aggregates because the majority of them are negatively charged\*\*. **SAM-CE\*\*** 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

- Enhances surface course placement
- Mobility resistance in challenging conditions
- Rapid breaking
- Polymer modification
- Works well with most aggregates
- Superior chip retention
- Provides water resistant seal

## APPLICATION

Recommended application conditions of **SAM-CE** 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. **SAM-CE** 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 **SAM-CE** binder. The chips must be placed before a significant portion of the emulsion has started to break.

## SPECIFICATIONS – TECHNICAL DATA

### SAM-CE

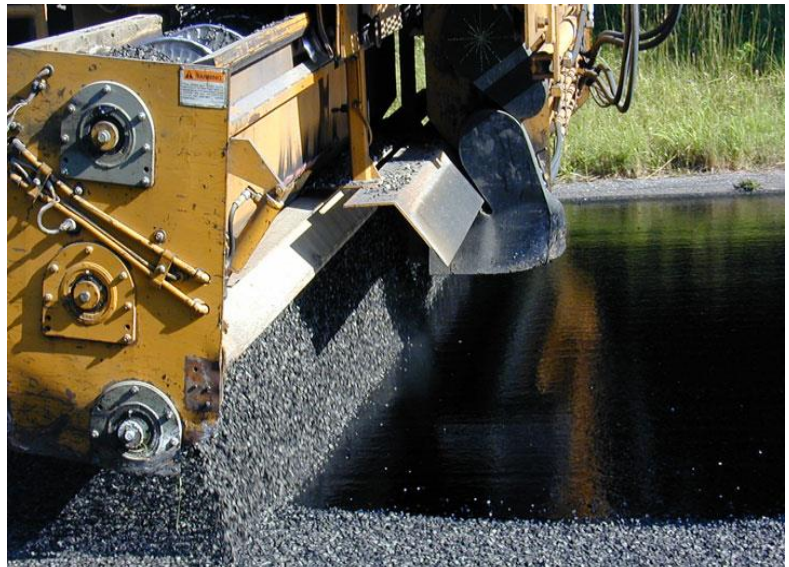
<u>Emulsion Tests</u>	<u>Specification</u>	<u>Typical Results</u>
Viscosity, SFS @ 50°C, sec	50 – 400	200
Sieve, %	< 0.10	<0.05
Residue by distillation, %	≥ 68.0	68.0 +/-
Pen, dmm	70 – 100	90
Softening Point, R & B, °C, min	60	65+/-
Elastic Recovery @10°C, 10 cm %, min	60.0	65+/-
Force Ductility, 4C, 40 cm ASTM D113	Report	0.30

### Product Handling Guidelines

- Emulsion must **not** 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

**SAM-CE** 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° - 190°F (77° - 88°C).



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