

PMRES

Cationic Polymer Modified Rejuvenating Emulsion Scrub Seal

DESCRIPTION

PMRES is a cationic polymer modified rejuvenating asphalt emulsion of moderate to high viscosity, specifically designed for Scrub Seal pavement preservation applications. It is specially designed to fill small cracks and voids without surface pre-treatment. Our proprietary rejuvenator adds chemical properties to the original binders on the road surface and in the cracks and voids that are lost with oxidation and age deterioration.

PMRES is designed to work effectively with a scrub seal aggregate gradation and application process to treat cracked, block cracked, alligator cracked, or severely raveled pavements. **PMRES**, combined with the scrub seal application process, can address friction loss and moisture damage. It also provides an effective interlayer treatment for cape seals or HMA overlays on roads in poor condition.

PMRES adheres well to most aggregates and is formulated to adhere well with the fine gradations typical of scrub seal applications*.

*Weather, aggregate, and application conditions can affect time until sweeping can be completed, return to traffic time, and chip retention.

FEATURES/BENEFITS

- Meets application requirements of Scrub Seal Binder
- Polymer modification
- Rejuvenates existing pavement binders in damaged areas and on surface of road
- Fills cracks and damage from top to bottom**
- Superior Scrub Seal gradation chip retention
- Provides water resistant seal

**Profile correction is limited and binder works best on cracks and damage of less than one-half inch.

APPLICATION

Recommended application conditions of **PMRES** 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. **PMRES** should be applied at the recommended rates; however, variances must be made for the size and gradation of the aggregate and the absorption characteristics of the pavement being treated. Surfaces should be clean, swept, and dry before application of the **PMRES** binder. The aggregate must be placed before a significant portion of the emulsion has started to break.

SPECIFICATIONS – TECHNICAL DATA

PMRES

Tests on Emulsion	Specification	Typical Results
Viscosity @ 50°C, SFS	100-600	200-300
Residue, w%, minimum	65	67
Sieve, w%, maximum	0.1	< 0.05
Oil distillate, w%, maximum	0.5	< 0.02
Demulsibility, DSS, 35ml, %	Report only	20-40
Penetration @ 4°C, minimum	40	60 - 80
Elastic Recovery @ 10°C on residue by distillation, %, minimum	45	50 +
Tests on Rejuvenator		
Viscosity, 140°F, cSt	50-300	100
Flash point, COC, °F, minimum	380	400 +
Saturate, w%, maximum	30	<20
Mass loss RTFO, w%, maximum	6.5	< 3.0
Viscosity ratio, cSt, maximum	3	< 2.0

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

PMRES should be applied between 0.30 and 0.36 gallons/SY depending on the aggregate gradation and the texture, porosity etc. of the surface and at emulsion temperatures 170° - 190°F (77° - 88°C).



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