



PAVEMENT PRESERVATION EMULSION

Data Sheet – RAVEL SEAL® Pavement Preservation Emulsion

Pavement Preservation Emulsion

Product Description

RAVEL SEAL® Gilsonite modified pavement preservation emulsion is formulated with penetrating oils and high asphalt resins designed with LOCK THE ROCK® technology to rejuvenate, preserve, and restore asphalt-based pavements.

Prolong the life of pavements and make taxpayers' dollars go farther utilizing eco-friendly asphalt emulsion solutions that reduce greenhouse emissions and are free of coal tar. Pavement preservation should be included in multi-year budgeting processes. <https://roadresource.org/> provides a user-friendly platform allowing agencies to evaluate their road system and help plan for pavement asset life-cycles.

Applications within the first few years of HMA life seal cracks and slow the HMA oxidation process while maintaining the like-new HMA maltene-asphaltene ratio.

Seal, Preserve, Extend

RAVEL SEAL emulsion is a penetrating binder best applied on any paved asphalt or loose slurry, micro and chip sealed roadways, driveways, and parking lots that are just starting to show signs of wear. Restoring the asphalt to like-new condition and extending the pavements life cycle. Rejuvenating Emulsion applications include miles of road, walking/golf paths, parking lots and any paved area.

RAVEL SEAL emulsion's **LOCK THE ROCK** technology allows you to easily glue aggregate back down in aging hot mix asphalt chip and slurry seal pavement. Applications to older oxidized pavements will rejuvenate and preserve the pavement, extending its life cycle.

Benefits / Features

- Signature grade Gilsonite modified asphalt emulsion based formula
- Preserves and rejuvenates asphalt
- Slows pavement deterioration in one application
- Extends pavement life up to 3 years
- Easy application
- Stops moisture from penetrating surface
- Excellent adhesion to pavement surfaces
- Rebinds asphalt and aggregate for added strength
- Seals minor cracks

Easy to Use Formulation

Another Quality Product Available From UNIQUE
3993 East 93rd Street Cleveland, OH 44105
800-441-4880
www.uniquepavingmaterials.com

RAVEL SEAL emulsion's ready to apply formula makes it easy and simple to apply by hand sprayer or distributor truck. Dries to a rich black color.

Surface Preparation

Pavement surface repairs should be made with UPM® Permanent Pavement Repair Material or hot mix asphalt. Repair larger cracks with KOLD-FLO® Gilsonite Modified Pourable Crack Filler. Allow surfaces recently repaired with **UPM** mix or **KOLD-FLO** crack filler to cure for at least 7 days prior to applying **RAVEL SEAL** emulsion.

Application Temperature

For best results and minimal curing times, **RAVEL SEAL** emulsion should be heated to and applied at 140-170° F (60 to 76°C).

Placement

Surface should be dry. Apply **RAVEL SEAL** bulk emulsion through a distributor as directed by UNIQUE. Typical application rates are between 0.09 to 0.12 gallons per square yard (0.41 to .52 Liters per square meter) depending on pavement condition. Localized application can be applied using a small spraying apparatus. Broadcast sand over areas requiring more friction.

Coverage

One gallon of **RAVEL SEAL** pavement preservation emulsion will cover approximately 100 square feet (11 square yards), (9.29 square meters). Coverage rate will vary due to age, surface condition and porosity. Newer pavements and recently sealed pavement will require less **RAVEL SEAL** emulsion for coverage.

Curing

Final cure time prior to opening to traffic should be 2-4 hours. Cure time will vary due to ambient conditions.

Storage

Keep from freezing.

Limitations

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RAVEL SEAL emulsion should not be applied in rainy or damp weather, to damp surfaces, or when rain is expected within 12 hours following application. **RAVEL SEAL** emulsion should only be applied when ambient temperature

is 50°F (10°C) and above. Contact UNIQUE's Technical Department for pavement treatment solutions over coal tar emulsion.

Specifications

RAVEL SEAL® REJUVENATING EMULSION PRODUCT SPECIFICATIONS		
Tests on Emulsion Concentrate	ASTM Test	Specification
Viscosity; Saybolt Furol Seconds (SFS) @ 77°F/25°C, seconds	D7496	20 - 100
Residue by Distillation or Evaporation, %	D6997/D6934	57 min
Sieve Test, %	D6933	0.1 max
24-Hour Stability, %	D6930	1.0 max
5-Day Settlement, %	D6930	5.0 max
Particle Charge or pH	D7402/D244	Positive or 6.5 max pH
Gilsonite® Composition, %	Calculation	20 min
Tall oil Pitch or Coal tar residue, %	Calculation	0.0 max
Polymer, %	Calculation	1.0 min
Resistance to Kerosine	D2939-25	Pass
Tests on Residue from Distillation or Evaporation		
Viscosity @ 275°F/135°C, cts	D4402	1,750 max
Solubility % in 1, 1, 1, Trichloroethylene, %	D2042	97.5 min
Penetration @ 77°F, dmm	D5	50 max
Asphaltenes, %	D2007	15 min
Saturates, %	D2007	15 max
Polar Compounds, %	D2007	25 min
Aromatics, %	D2007	15 min
Maltenes, %	Calculation	50 - 85
Tests on 1:1 (Emulsion : Water)		
Viscosity; Saybolt Furol Seconds (SFS) @ 77°F/25°C, seconds	D7496	5 – 50
Residue by Distillation or Evaporation, %	D6997/D6934	28.5 min
Pump Stability, Pass/Fail	FAA P-608	Pass
Tests on 2:1 (Emulsion : Water)		
Viscosity; Saybolt Furol Seconds (SFS) @ 77°F/25°C, seconds	D7496	5 – 50
Residue by Distillation or Evaporation, %	D6997/D6934	38 min
Pump Stability, Pass/Fail	FAA P-608	Pass

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Packaging

Table with 3 columns: Item #, Description, and quantity/units. Rows include items 53-00016, 53-00023, 53-00025, 53-00017, 53-00018, and 53-00019.

Truckload quantities are typical but may vary depending on destination, truck tare weight and/or trailer type (box van, flat bed, rail shipments or ocean freight container).

Caution:

This product contains petroleum derived and various chemicals to enhance performance. Refer to SDS for details. Avoid skin contact and use appropriate safety equipment, suggested but not limited to approved safety glasses and gloves.

Limited Warranty:

UNIQUE Paving Materials Corp. (UNIQUE) warrants that at the time and place we make shipment our materials will be of good quality and will conform with our published specifications in force on the date of acceptance of the order.

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