REJUVENITE S

CATIONIC EMULSIFIED REJUVENATING AGENT

PRODUCT DESCRIPTION

REJUVENITE S is a spray grade emulsified asphalt rejuvenating agent. It's unique formulation prolongs pavemenlife by restoring a pavement's original properties that have been lost through natural oxidation, loss of volatiles, effect of de-icing chemicals and other surface contaminants.

GENERAL PRODUCT FEATURES

- Restores the physical and chemical properties, improving the low temperature Performance (PG) grade resulting in an increase in crack resistance in old existing asphalt concrete pavement
- Restores the maltene fraction to the old existing asphalt concrete pavement binder that was lost due to oxidative field aging
- Does not cause continuous age softening of the old existing asphalt concrete pavement binder which could lead to increased rutting potential
- Can be combined with virgin asphalt to customize the emulsion to replace and rejuvenate the aged asphalt in a RAP mix (see REJUVENITE RAP)
- When added to RAP, the finished product can be used as a low volume surface mix. The surface should ideally be covered with a thin surfacing or fog coat.

RECOMMENDED USE

REJUVENITE S can be used as an emulsified preservative seal which penetrates a pavement surface, and restores the original properties of the asphalt in concrete and helps to seal hairline cracks and fill surface pores which have developed due to age hardening in an asphalt concrete.

REJUVENITE S added to asphalt concrete pavement during or after heater scarification returns pavement to its original state by restoring its flexibility and thus "reversing" and delaying the aging process.



McASPHALT INDUSTRIES LIMITED

 8800 Sheppard Ave East
 T 416.281.8181
 TF 1.800.268.4238

 Toronto, ON M1B 5R4
 F 416.281.8842
 E info@mcasphalt.com

SPECIFICATIONS AND TYPICAL RESULTS

| TEST | TYPICAL DATA | SPEC RANGE | |
|-----------------------------|-----------------|----------------|-----|
| | | Min | Max |
| Tests on Emulsion | | | |
| SF Viscosity, 25°C, SFs | 28 | 20 | 120 |
| Sieve Test, 850 µm, % | Pass | Pass | |
| Miscibility Test, .2N CaCl2 | Pass | No coagulation | |
| Evap. Residue, % | 60.5 | 60 | 65 |
| Particle Charge | (+) | (+) | |
| Tests on Residue | | | |
| Flash Point by COC, °C | | 200 | |
| Kin. Viscosity, 60°C, cSt | 22 | 10 | 200 |
| Asphaltenes(n-heptane), % | 0 | | 1.0 |
| Ash Content, % | 0.07 | | 1.0 |

REJUVENITE S

CATIONIC EMULSIFIED REJUVENATING AGENT

APPLICATION GUIDELINES

REJUVENITE S can be sprayed using a convetional asphalt distributor onto existing asphalt pavements. Prior to spraying, the product should be diluted with potable water to ~40 % residue (2 parts **REJUVENITE S** to 1 part water).

General application guidelines for diluted **REJUVENITE S** are between $0.3 - 0.5 \text{ L/m}^2$, or as directed by the project engineer. Test runs might be required on specific pavement surfaces. The absolute minimum application rate should be 0.15 L/m^2 , and under no circumstances should the application rate exceed 1.0 L/m². **REJUVENITE S** should not be applied if the existing pavement surface has low surface voids, shows signs of flushing or is coated by any type of asphalt sealer.

After application of **REJUVENITE S** on an existing asphalt pavement, the surface should be allowed to absorb most of the oils. This normally takes between 30 and 60 minutes, depending on the surface tightness and voids of the pavement. When no standing material remains on the surface, a light coat of sand (generally 0.5 - 1.0 kg/m2) should be applied. This is to prevent low skid resistance and slick spots on the pavement.

When used with heater scarifying, **REJUVENITE S** should be used undiluted. Core samples should always be analyzed and a full design should be done before construction to determine the exact dosage of **REJUVENITE S** to be applied.

The following performance guidelines should be consulted prior to application:

- AEMA Restorative Seals using Emulsified Recycled Agents
- ARRA Heater Scarification Guidelines
- Contact your local MCA Marketing representative for further instructions and more guideline application directions
- No heat should be applied on the **REJUVENITE S** emulsion when transported or sprayed.

PACKAGING, STORAGE AND HANDLING

- 20 litre paid (5 gal pail)
- 205 litre drum (45 gal drum)
- Bulk Tanker

STORAGE

Keep in an original container or an approved alternative made from a compatible material, kept tightly closed when in use. Store in accordance with local regulations.

CERTIFICATION OF QUALITY

McAsphalt Industries Limited is accredited to the quality standard ISO 9001 and to the environmental standard ISO 14001.

Each lot of **REJUVENITE S** is produced using the strictest quality, safety and environmental guidelines. Each production lot is tested to ensure it meets or exceeds all performance requirements, and it is delivered with a Certificate of Analysis.

PRODUCT SUPPORT

With the *MCA* Advantage, you get a partner and advisor who will consult with you about designs, specifications, technical services, processes and material selection. By developing innovative, custom-designed products that offer additional benefits, such as peak performance in unique conditions, improved field performance, greater environmental and health benefits, the *MCA* Advantage provides significant long-term cost savings, resulting in lower "total cost of ownership."



McASPHALT INDUSTRIES LIMITED