# **REJUVENITE B**

# EMULSIFIED GREEN REJUVENATING AGENT

### PRODUCT DESCRIPTION

**REJUVENITE B** is a spray-grade, emulsified asphalt rejuvenating agent made from renewable sources. Its unique formulation prolongs pavement life by restoring a pavement's original properties lost through natural oxidation, loss of volatiles, effects of de-icing chemicals, and other surface contaminants.

#### **GENERAL PRODUCT FEATURES**

- When sprayed on old asphalt surfaces, REJUVENITE
   B leads to a gentle reversal of the age-related surface stiffness of the asphalt binder, healing micro-cracks in the road surface.
- Restores the physical and chemical properties in old asphalt concrete pavement, improving the lowtemperature Performance Grade (PG), increasing its resistance to cracking
- Restores the maltene fraction to the old asphalt concrete pavement binder that was lost due to oxidative field aging
- Does not cause continuous age-softening of the old asphalt concrete pavement binder. Continuous agesoftening increases rutting potential.
- Can be combined with virgin asphalt in a RAP mix to replace and rejuvenate the aged asphalt (see REJUVENITE RAP)
- Can be used as a low-volume surface mix when added to RAP. The surface should be covered with a thin surfacing or fog coat.

#### **RECOMMENDED USE**

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

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

#### SPECIFICATIONS AND TYPICAL RESULTS

TEST	TYPICAL	SPEC.	
	DATA	Min	Max
Tests on Emulsion			
SF Viscosity, 25°C, SFs	28	20	120
Sieve Test, 850 µm, %	Pass	Pass	
Miscibility Test, 0.2 N, CaCl <sub>2</sub>	Pass	No coagulation	
Evaporation Residue, %	60.5	60	65
Particle Charge	(+)	(+), (-), or 0	
Tests on Residue			
Flash Point by COC, °C	-	200	-
Kinematic Viscosity, 60°C, cSt	22	10	200
Asphaltenes (n-heptane), %	0	-	1.0
Ash Content, %	0.07	-	1.0

#### **CERTIFICATION OF SUSTAINABILITY**

**REJUVENITE B** is produced entirely from renewable resources and is free of any chemicals than could harm the environment. This product was formulated and tested for performance and for renewability and sustainability.

### **CERTIFICATION OF QUALITY**

**McAsphalt Industries Limited** is accredited to the quality management standard **ISO 9001**, the environmental management standard **ISO 14001**, and the occupational health and safety standard **ISO 45001**.

Each lot of **REJUVENITE B** 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 is delivered with a Certificate of Analysis.



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### **APPLICATION GUIDELINES**

- REJUVENITE B can be sprayed using a conventional asphalt distributor on existing asphalt pavements. Prior to spraying, the product should be diluted with potable water to ~40% residue (2 parts REJUVENITE B to 1 part water).
- General application guidelines for diluted REJUVENITE B are between 0.3 to 0.5 L/m² (0.007 to 0.012 gal/ft²) 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/m² (0.004 gal/ft²) and under no circumstances should the application rate exceed 1.0 L/m² (0.025 gal/ft²).
- REJUVENITE B 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 applying REJUVENITE B to an existing asphalt pavement, the surface should be allowed to absorb most of the oils. This normally takes 30 to 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 to 1.0 kg/m² (0.1 to 0.2 lb/ft²)) should be applied to avoid creating low skid resistance and slick spots on the pavement.
- When used with heater scarifying, REJUVENITE B 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 B to be applied.
- No heat should be applied to REJUVENITE B emulsion when transported or sprayed.
- The following performance guidelines should be consulted prior to applying REJUVENITE B: AEMA (Restorative Seals using Emulsified Recycled Agents) and ARRA (Heater Scarification Guidelines).
- Contact your local MCA Marketing representative for further instructions and more application guidelines.

### PACKAGING, STORAGE AND HANDLING

**REJUVENITE B** is available in the following packaging:

- 20 L (5 gal) pail
- 205 L (54 gal) drum
- Bulk Tanker

# **STORAGE**

Keep **REJUVENITE B** in its original container or an approved alternative made from a compatible material. Keep the container tightly closed when in use. Store in accordance with local regulations.

### 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, and greater environmental and health benefits, the *MCA* **Advantage** provides significant long-term cost savings, resulting in lower total cost of ownership.

