

Product Evaluation

RE: Review of Reclamite Preservative Seal

PRODUCT

The Reclamite Preservative Seal is a surface treatment that is produced by OILDALE, California and distributed by Golden Bear Oil Specialties.

VENDOR CLAIMS AND INFORMATION

CLAIMS

Reclamite rejuvenating agent is formulated from petroleum maltenes to prolong the life of asphalt pavements. It provides a simple, one-step method for restoring and preserving plasticity and durability in asphalt, and is effective for extending the life of newly constructed pavement and for corrective maintenance on deteriorated pavements. Product web link: <http://www.goldenbearoil.com/>

HISTORY

Reclamite is a rejuvenator that has been successfully used for over 25 years. Reclamite contains selected maltene fractions in chemical balance that penetrate the surface of the asphalt pavement rebalancing the chemistry of the oxidized asphalt. It has shown that Reclamite improves the durability of the pavement near the surface where the deterioration begins. It also tightens new asphalt pavements that are open due to poor compaction and seals the surface.

POTENTIAL USAGE

Reclamite is used for surface treatment; the Reclamite is diluted at a ratio of 2 parts Reclamite to 1 part water and applied at application rates between 0.30 litres/m² and 0.65 litres/m². The pavement is then sanded at an application rate of 0.5 to 1 kg/m² of 9.5 mm sand with 2 – 12% passing the 200 sieve (0.075 mm). Sand can be left to traffic or broomed after curing.

Reclamite is also used for the rejuvenation of asphalt millings. Typical application rates are ¾ of 1% to 1.5% by weight of mix of Reclamite diluted 50:50 with water for pavement depths of 100 mm this would be 2 – 3.5 litres/m². Reclamite fluxes with the existing asphalt rebalancing those fractions that have oxidized. It also provides a softening effect and on cure densifies the binder.

A bridge deck in New York State underwent a rejuvenation of its 10 year old asphalt overlay, with the aim to extend its service life. The use of rejuvenators to extend the service life of asphalt concrete overlays on bridge decks is promising.

STANDARDS

ASTM D244	Standard Test Methods and Practices for Emulsified Asphalts
ASTM D2006	Method of Test for Characteristic Groups in Rubber Extender and Processing Oils by Precipitation Methods (discontinued).

ALBERTA TRANSPORTATION COMMENTS

APPLICATION STANDARDS

- The Alberta Transportation Specification 3.10, Section 3.10.2.2, Surface Treatment - Asphalt specifies that asphalt used for asphalt surface treatment shall be SC-250, SC-800 and/or SC-70, unless otherwise specified.
- The Alberta Transportation Recognized Products List, Surface Treatment, Surface Treatment – Proprietary currently lists Reclamite.

RECOMMENDATIONS

Reclamite Preservative Seal will replace Reclamite on the Alberta Transportation Products List.

TRIAL PROJECTS

Hwy. 1:10 – EBL shld., EBL rt. Lane, WBL shld., EBL offramp chestemere Int.

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