



TECHNICAL BULLETIN #11

REJUVENEX 60E

Rejuvenation of Aged / Oxidised Asphalt Surfaces

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Description

Rejuvenex 60E is a cationic, oil in water emulsion made up of petroleum resins and a selected blend of maltene components. This rejuvenation agent is spray applied to an aged or oxidised surface to overcome the effects of aging bitumen. Rejuvenex 60E is a replacement product for *Reclamite* which is no longer available.

Uses

Age hardened bitumen is restored by adding components that replace those, which due to chemical change, become ineffective or insufficient in retaining the cementing and binding properties of bitumen. By adding those fractions that are deficient in the binder, the bitumen can be replasticised and the aging process reversed. A treatment of Rejuvenex 60E will decrease the water penetration rate in the pavement by up to 90%.

Rejuvenex 60E has the ability to penetrate weathered bituminous pavements and is typically used on any asphalt that has reasonable shape permitting water runoff and with minimal cracking. It can also be applied to an oxidised spray seal binder.

Benefits

- rejuvenates oxidised asphalt or sprayed seal surfaces
- increased wearing course durability
- is emulsion based, with low solvent content
- extends pavement life
- binds ravelling asphalt surfaces
- reduces maintenance cost
- fast curing, and in some conditions can be applied at nighttime
- non-hazardous
- treatment is repeatable
- typical life cycle of 5-6 years between treatments
- cost effective treatment

Application

Rejuvenex 60E is supplied as a concentrate and should be diluted approx 1:1 with water prior to application. In some instances the dilution can be reduced up to 2 parts Rejuvenex to 1 part water but this is dependent on surface texture and porosity of the surface. The application rate of the diluted Rejuvenex 60E is dependent on the pavements porosity, as determined by the grease ring test. A general guide is between 0.35 – 0.45 litres per m² for asphalt and 0.25 – 0.35 litres per m² for sprayed seal surfaces .

Rejuvenex 60E is most effective in dry climates on pavements which are relatively pervious. At least 24 hours should have lapsed if rain had been experienced prior to application of Rejuvenex. The reaction time of Rejuvenex and bitumen is time dependent and a function of temperature. In cooler weather Rejuvenex 60E can be warmed up to 60°C to facilitate absorption.

An application of too much Rejuvenex 60E can provide a skid hazard, include sanding as a preventative. Typical cure or break time is 10-15 minutes.

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