

Technical Data Sheet

Viva Bitumen S0.3B

Polymer Modified Bitumen



Description

Viva Bitumen S0.3B is a high performance modified sealing grade bitumen. The binder has been designed to be used in HSS applications such as heavily trafficked moderately distressed pavements where environmental cracking may be observed. Environmental cracks are slow moving and can be induced by seasonal or diurnal changes in temperature or ground water conditions. Viva Bitumen S0.3B is a suitable bitumen for HSS sites where traffic loadings are high or SAM applications with slow moving cracks.

Performance features

The performance characteristics of bitumen can be significantly improved through the addition of appropriate polymers. Changes to the rheology of the base binder confer beneficial properties to the seal resulting in the following:

- Reduced temperature susceptibility
- Increased stiffness modulus
- Substantially increased elasticity
- Improved adhesion
- Improved initial stone retention

Summary of benefits

Advantages of Viva Bitumen S0.3B over conventional binders are as follows:

- Improved aggregate adhesion in highly stressed areas.
- Superior rheology for seals subject to environmentally induced cracks.
- Higher cohesive strength to withstand stripping action of high speed traffic.
- Higher viscosity at elevated temperatures combats bleeding of binder.

Applications

Viva Bitumen S0.3B is a lightly modified bitumen which can be used for sealing applications where conditions require the use of a more robust and elastic seal than offered by conventional binders. Lightly fatigued bases which exhibit slow moving cracks, expanding and contracting with environmental changes provide ideal sites for treatment with Viva Bitumen S0.3B. Preferably, a program of crack sealing treatment should be carried out prior to seal application in order to minimise the potential for the crack pattern to reflect through the seal.

Cutting Practice

Recommended cutting practice for S0.3B is as follows:

Parts cutter (vol) per 100 parts binder @ 15°C		
Pavement Temp (°C)	Traffic Conditions	Rate
15 - 20	Low (<100 v/l/d) Medium (100 - 1500 v/l/d) Heavy (>1500 v/l/d)	5-7 4-6 3-5
21 - 25	Low Medium Heavy	3-6 2-4 2-4
26 - 35	Low Medium Heavy	2-3 2-3 1-2
>36	All conditions	0-2

Health and safety

Viva Bitumen S0.3B is unlikely to present any significant health or safety hazard when properly used in the recommended application where good standards of industrial practice are maintained.

Further guidance on Product Health and Safety is available on the relevant Material Safety Data Sheet

Specifications/approvals	
AG:PT/T190	S35E
TMR MRS 11.18	S0.3B

Typical characteristics

Description	Units	Methods	Typical
Consistency at 60° C	Pa.s	AG:PT/T1 21	350 - 500
Stiffness at 15° C	kPa	AG:PT/T1 21	180 max
Torsional recovery at 25° C	%	AG:PT/T1 22	16 min
Softening Point	deg °C	AG:PT/T1 31	48 min