

Technical Data Sheet

Viva Bitumen A5E

Polymer Modified Bitumen



Description

Viva Bitumen A5E is a high performance polymer modified bitumen. This elastic binder greatly enhances the resistance to permanent deformation and resistance to fatigue cracking of asphalt mixtures. Viva Bitumen A5E is designed for applications where extreme axle loading occurs, such as airport use, container terminals and heavily trafficked intersections and inclines.

Performance features

The addition of carefully selected polymers can significantly alter the rheological characteristics of bitumen resulting in greatly enhanced performance of both the binder and the asphalt mixture. These are;

- Reduced temperature susceptibility
- Increased stiffness modulus at high temperatures
- Substantially increased elasticity
- Improved adhesion

Viva Bitumen A5E utilises a special low molecular weight elastomeric polymer that offers compatibility with hard base grades of bitumen.

This technology is only available through the integration of these premium SBS polymers with high-grade bitumen to give a binder that combines superior performance with safe handling and ease of application.

This ensures the formation of a stable, three dimensional network within the bitumen, giving Viva Bitumen A5E substantially improved properties when compared with conventional bitumen and other PMB's.

Summary of benefits

The advantages conferred by Viva Bitumen A5E in asphalt mixtures compared with conventional materials are as follows:

- Greater resistance to permanent deformation
- Improved fatigue performance
- Increased resistance to reflective cracking
- Provides a durable surface of high cohesive strength
- Improves adhesion between wearing and base course
- Greater ability to absorb thermal movements

Applications

Viva Bitumen A5E is typically used as a binder in locations where extreme traffic loads and/or extremes of temperature can be expected. Viva Bitumen A5E is ideal for use at corners, controlled intersections, braking points and acceleration areas which have intensified problems of damage, deformation and breakdown of pavements

Class	Mixing temperature	Medium term storage temperature	Medium term storage time	Minimum compaction temperature
Viva Bitumen A5E	165 - 175°C	140 - 160°C	10 -7 days	110°C

Health & safety

Viva Bitumen A5E 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	
AGPT/T190	A5E
RMS 3252	A5E

Typical characteristics

Description	Units	Methods	Typical
Consistency at 60 C	Pa.s	AG:PT/T1 21	>8000
Softening point	Deg C	AG:PT/T1 21	>88
Torsional recovery at 25 C	%	AG:PT/T1 22	>24