

OLEXOBIT® AB5

Polymer Modified Binder

Asphalt Applications

Description

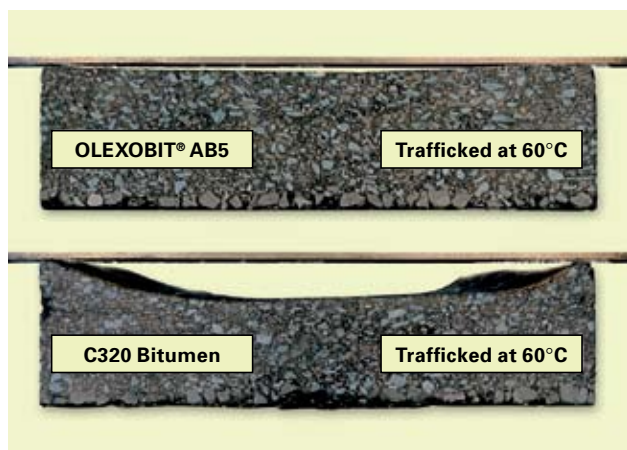
OLEXOBIT® AB5 is a polymer modified binder (PMB) that is designed for use in dense-graded asphalt to minimise permanent deformation and fatigue cracking. When used in open-graded asphalt, OLEXOBIT® AB5 provides increased cohesive strength and durability.

Application

OLEXOBIT® AB5 is recommended for use in:

- Dense-graded asphalt
 - over marginal or sound pavement
- In open-graded asphalt
 - where heavy traffic loadings are observed (> 1000 HV/lane/day)
 - on pavements subject to temperatures > 58°C

For further advice on the appropriate application of OLEXOBIT® AB5, please contact BP Bitumen.



The comparative rutting test for Class C320 bitumen and OLEXOBIT® AB5 above show that OLEXOBIT® AB5 provides excellent resistance to rutting and permanent deformation compared to C320.

Key Benefits

Performance Benefits

- Excellent resistance to rutting and fatigue in dense-graded asphalt
- Superior cohesive strength to provide excellent resistance to abrasion
- Enhanced durability
- Reduced binder drainage in open-graded asphalt
- Thick cohesive binder to reduce oxidative effects in open-graded asphalt

Application Benefits

- Improved storage and travel stability over conventional SBS-modified binders
- Low-fuming formula

Specification

OLEXOBIT® AB5 is manufactured to comply with Austroads AP-T41 A15E grade.

Typical Characteristics

Property	Typical Value
Softening Point, °C	92
Torsional Recovery at 25°C, %	70
Viscosity at 165°C, Pa.s	0.7
Consistency at 60°C, Pa.s	12,000
Stiffness at 25°C, kPa	17
Segregation, %	0.5

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Storage & Handling

The storage of bituminous binders for prolonged periods at elevated temperatures should be avoided as quality may be adversely affected. As a general rule, bituminous binders should be stored at the lowest temperature that enables practical use.

Maximum Storage Temperature Recommendations	
Storage for up to 90 days	110°C
Storage for up to 7 days	140°C
Storage for up to 4 days	160°C
Storage for up to 24 hours	180°C
Maximum temperature	190°C

Application Temperature Recommendations	
Minimum pumping temperature	155°C
Asphalt mixing	160°C - 175°C
Asphalt compaction	140°C - 160°C

Health & Safety

To ensure hot bitumen is used in a safe and efficient manner the following safety precautions must be followed:

- **Wear suitable personal protective equipment (PPE) at all times.** Full skin protection is required to avoid accidental burns when transferring or handling hot bitumen.
- **Always prevent contact between water and hot bitumen** by checking the contents of the previous load before loading bituminous products into tankers and by following procedures to avoid violent boil-over of tanks.
- **Avoid exposure to fumes** by standing back on the gantry or upwind until the vapours have dispersed.
- **Minimise bitumen fume** by heating bitumen and asphalt products to the recommended temperatures.
- **Minimise the use of diesel** when cleaning equipment as this contributes to the bitumen fume.

Safe Handling of SBS-modified PMBs

Polymer modified binders incorporating SBS polymer require close attention to their handling and application to avoid degradation of the binder and exposure to irritant fumes. When handling SBS based binders it is important to remember the following points:

- Know the product being handled
- Know the recommended storage and handling temperatures
- SBS-based PMBs have their own unique odour, however, they are safe to use when stored and handled according to recommendations

For a full description of hazards associated with the use of bituminous binders, please refer to the appropriate material safety data sheet (MSDS) available on the BP Bitumen website.

Quality Assurance

BP Bitumen is recognised nationally for its proven track record in delivering products of consistently high quality. Every day our products perform under the most diverse and demanding road conditions in Australia. This is attributable to a combination of our unique product technology, comprehensive quality assurance programs, operational efficiency and sophisticated production processes – all supported by our highly skilled and experienced staff.

We maintain an in-house national technical centre in Melbourne which focuses on R&D, as well as providing technical expertise and support to our customers throughout Australia. Our team of technical specialists is dedicated to ensuring our products are thoroughly tested at every stage – from the selection of crude oil at the start of the production process, right through to delivery.

Our product stewardship and rigorous quality management practices reflect our commitment to delivering the highest quality products that perform on the road. Our commitment to quality is recognised by our accreditation to Australian Standard AS/NZS 9001.

For further information, please contact us:

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