

Going further
— for better performing roads



CARBONBIND® A15E

POLYMER MODIFIED BINDER

Incorporating Biogenic (plant grown) material Asphalt Applications

Puma CARBONBIND® A15E incorporates sustainably grown biogenic (plant grown) material. The CARBONBIND® technology allows atmospheric CO2 captured by plants to be permanently stored in road pavements. This significantly reduces the carbon footprint of the overall binder and asphalt products that contain it.

A15E is designed to minimise permanent deformation and fatigue cracking. When used in open-graded asphalt, CARBONBIND® A15E provides increased cohesive strength and durability.

Key benefits

PERFORMANCE BENEFITS

- Excellent resistance to rutting and fatigue
- Externally verified to reduce carbon footprint by up to 164 kg/t compared to conventional A15E
- Includes ISCC+ certified sustainably grown biogenic component

APPLICATION BENEFITS

- Same trusted storage and travel stability as conventional PMB Puma binders
- Reduced odour compared to other biogenic binders

Typical characteristics

Property	Typical Value	Specification Limits	Test Method
Softening Point (°C)	88	82 – 105	AG:PT/T131
Torsional Recovery at 25°C (%)	73	55 – 80	AG:PT/T122
Viscosity at 165°C (Pa.s)	0.8	max. 0.9	AG:PT/T111
Consistency 6% at 60°C (Pa.s)	1200	900	AG:PT/T121
Stiffness at 25°C (kPa)	12	max. 30	AG:PT/T121
Segregation (%)	1.0	max. 8	AG:PT/T108

Specification

CarbonBind® A15E is manufactured to comply with Austroads AGPT/T190 and ATS-3110 A15E grade.

Storage and handling

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

Temperature Recommendations	
Storage for up to 7 days	160 °C – 175 °C
Storage for up to 14 days	145 °C – 155 °C
Asphalt mixing	160 °C – 175 °C
Asphalt compaction	140 °C – 160 °C

Refer to AAPA Advisory Note 7 for further information.

Health and safety

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

Quality assurance

Puma Bitumen is known in the industry for consistently delivering high quality products. Our products can be relied upon to perform under the most diverse and demanding road conditions in Australia. This is possible thanks to our innovative product technology, comprehensive quality assurance programmes, efficient operations and a sophisticated production process unique to Puma – all supported by our highly skilled and experienced staff.

The Puma Energy Global Bitumen Technology Centre based in Altona, Victoria, is where we conduct industry-leading research and development. It is also from here that we provide technical expertise and support to our customers throughout Australia and across the world. 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 customer supply.

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