

MACSEAL LJB

HOT-APPLIED LONGITUDINAL JOINT BOND

PRODUCT DESCRIPTION

MACSEAL LJB is a preventive maintenance product for treating hot mix asphalt joints in order to prevent future crack formation.

Asphalt pavements often show low density at the longitudinal joints because of unconfined compaction or compaction against a cold joint. As a result of their lower density, longitudinal joints usually show early signs of distress because of water ingress and freeze-thaw damage. To prevent this, **MACSEAL LJB** is applied to the vertical joint face before placing and compacting the adjacent hot mix.

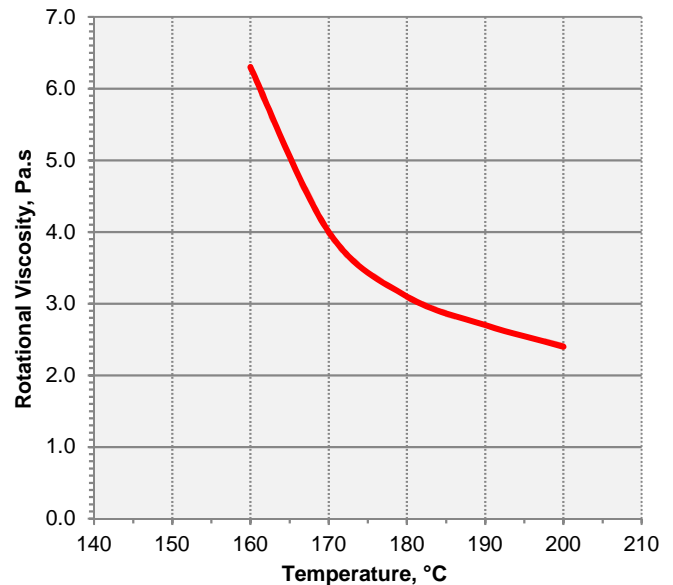
GENERAL PRODUCT FEATURES

- Cures to a non-tacky finish
- Can be applied over a wide range of temperatures
- Engineered for moderate to cold in-service climate temperatures
- Flexible nature allows for quick relaxation during the build-up of thermal stresses in asphalt pavements which translates to enhanced performance.
- Easy to apply via a gravity-fed mechanism (e.g. pour pot, walk behind units, etc.) as well as via pump and hose/wand method
- Adheres very well to both hot mix asphalt and Portland cement concrete
- Engineered specifically for oil jacketed double boiler kettles. Not recommended for direct fire melters.
- Prevents the intrusion of water and incompressible matter into the cracks of asphaltic and Portland cement concrete pavements
- Engineered to adhere to vertical joints
- Lowers the air voids in an uncompacted cold joint
- Designed to produce a long-lasting seal between two asphalt concrete pavements
- Can also be used around manholes, utility cuts, and all sides in asphalt repairs

SPECIFICATIONS AND TYPICAL RESULTS

TEST	TYPICAL DATA	SPEC.	
		Min	Max
Flash Point (COC), °C	255	-	-
Cone Penetration, 25°C, dmm	65	60	100
Flow, 60°C, mm	0	-	5
Softening Point R&B, °C	87	77	-
Cold Bend, -18°C	Pass	Pass	-
Resilience, 25°C, %	62	30	-
Ductility, 25°C, cm	32	30	-
Ductility, 4°C, cm	34	30	-
Rotational Viscosity, 204°C, Pa.s	2.5	2.0	8.0
Asphalt Compatibility	Pass	Pass	-

TEMPERATURE VISCOSITY CHART



MCASPALT INDUSTRIES LIMITED

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 ISO 9001/14001/45001

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RECOMMENDED USE

MACSEAL LJB is applied as a hot-extruded, non-slumping elastic asphalt compound onto the cold joint before the neighbouring mat is joined to it. The joint is then sealed when the hot mix is placed on it and compacted. **MACSEAL LJB** melts and fills the voids in the space, forming a flexible, elastic joint. In addition to the increase in density at and around the joint, **MACSEAL LJB** also provides a strong adhesive bond between the top and bottom layers of asphalt pavement.

APPLICATION GUIDELINES

For detailed **MACSEAL LJB** joint and crack preparation or specific application instructions, refer to specifying agency publications or contact an **MCA** representative.

APPLICATION TEMPERATURES

Recommended pouring temperature: 185°C (365°F)

Maximum safe heating temperature: 200°C (392°F)

MELTING EQUIPMENT

MACSEAL LJB must be melted in an oil jacketed double boiler kettle equipped with a mechanical agitator and separate temperature thermometers for both the oil bath and the melting vat.

COVERAGE

MACSEAL LJB weighs approximately 1.2 kg/L (9.8 lb/gal). A joint 12.7 mm x 12.7 mm (½ x ½ in) requires approximately 19.0 kg/100 linear meters (12.8 lb/100 linear feet).

PACKAGING, STORAGE AND HANDLING

MACSEAL LJB is available in the following packaging:

- 2 x 11 kg (25 lb) polybags in a high-strength, corrugated cardboard container. **MACSEAL LJB** in boxes should be kept in a dry environment.

CERTIFICATION OF QUALITY

McAsphalt Industries Limited is accredited to the quality management standard **ISO 9001**, the environmental management standard **ISO 14001**, and the occupational health and safety standard **ISO 45001**.

Each lot of **MACSEAL LJB** is produced using the strictest quality, safety, and environmental guidelines. Each production lot is tested to ensure it meets or exceeds all performance requirements and is delivered with a Certificate of Analysis.

PRODUCT SUPPORT

With the **MCA Advantage**, you get a partner and advisor who will consult with you about designs, specifications, technical services, processes, and material selection. By developing innovative, custom-designed products that offer additional benefits such as peak performance in unique conditions, improved field performance, and greater environmental and health benefits, the **MCA Advantage** provides significant long-term cost savings, resulting in lower total cost of ownership.



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