

MACSEAL LJB

HOT APPLIED LONGITUDINAL JOINT BOND

PRODUCT DESCRIPTION

MACSEAL LJB is an innovative preventive maintenance product for treating hot mix asphalt joints 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. Longitudinal joints usually show early signs of distress because of water ingress and freeze-thaw damage as a result of their lower density. 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
- Engineered to adhere and stay onto vertical joints
- Engineered for moderate to cold climates
- Its flexible nature allows for a decrease in stress build up and enhanced field performance
- Easy to apply via pump and hose/wand method
- Adheres very well to both hot mix asphalt and Portland cement concrete
- Engineered specifically for double boiler/oil jacketed kettles. Not recommended for direct fire melters
- 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 on asphalt repairs.

RECOMMENDED USE

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

SPECIFICATIONS AND TYPICAL RESULTS

TEST	TYPICAL DATA	SPEC RANGE	
		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 Visc, 204°C, Pa.s	2.5	2.0	8.0
Asphalt Compatibility	Pass	Pass	...

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APPLICATION GUIDELINES

For detailed **MACSEAL LJB** joint and crack preparation or specific application instructions refer to specifying agency publications

APPLICATION TEMPERATURES

Recommended Pouring Temperature 185°C (365°F)

Maximum Safe Heating Temperature 200°C (392°F)

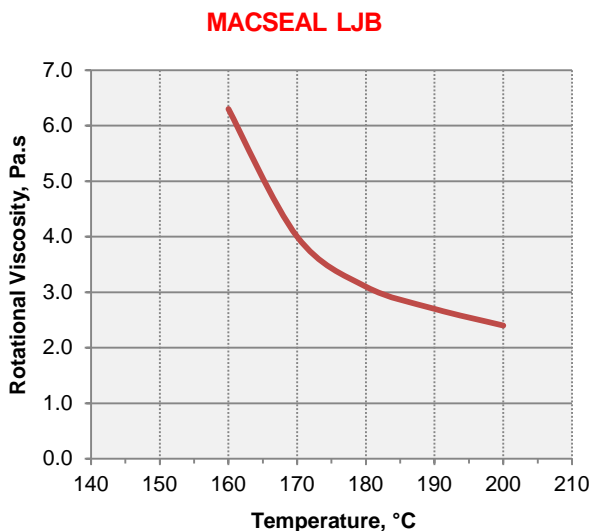
MELTING EQUIPMENT

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

COVERAGE

MACSEAL LJB weighs approximately 9.8 lb/gal (1.18 kg/L). A joint ½ x ½ " (12.7 mm x 12.7 mm) requires approximately 12.8 lb per 100 lineal feet or 19.0 kg per 100 lineal meters.

TEMPERATURE VISCOSITY CHART



PACKAGING, STORAGE AND HANDLING

MACSEAL LJB is available in the following packaging:

- 2 x 25 lb polybags in a high strength corrugated cardboard container
- Boxes should be held in a dry environment

CERTIFICATION OF QUALITY

McAsphalt Industries Limited is accredited to the quality standard **ISO 9001** and to the environmental standard **ISO 14001**.

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 it 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, 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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