PRODUCT DESCRIPTION

MACSEAL 6690-2 is a premium-quality, high-performance, hot-applied, single-component joint and crack sealant.

MACSEAL 6690-2 is a formulated blend of engineered asphalts, virgin polymers, synthetic rubbers, reinforcing fillers, anti-oxidants, and UV inhibitors.

MACSEAL 6690-2 offers advanced low-temperature bonding properties, prolonged resistance to degradation from weather and a positive seal during the expansion and contraction of the joint or crack. It remains ductile and highly resilient at low and high service temperatures.

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 a 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

RECOMMENDED USE

MACSEAL 6690-2 is recommended for the large-scale sealing of joints and random cracks in Portland cement concrete and asphalt pavements. It will provide good protection against repeated freeze-thaw cycles.

SPECIFICATIONS AND TYPICAL RESULTS

<table>
<thead>
<tr>
<th>TEST</th>
<th>TYPICAL DATA</th>
<th>SPEC.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point (COC), °C</td>
<td>255</td>
<td>-</td>
</tr>
<tr>
<td>Cone Penetration, 25°C, dmm</td>
<td>75</td>
<td>90</td>
</tr>
<tr>
<td>Flow, 60°C, mm</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Softening Point R&amp;B, °C</td>
<td>88</td>
<td>80</td>
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<tr>
<td>Bond, 50% EXT, -29°C, 3 cycles</td>
<td>Pass 3</td>
<td>3 sp</td>
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<tr>
<td>Resilience, 25°C, %</td>
<td>69</td>
<td>60</td>
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<tr>
<td>Asphalt Compatibility</td>
<td>Pass</td>
<td>Pass</td>
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</tbody>
</table>

TEMPERATURE VISCOSITY CHART

<table>
<thead>
<tr>
<th>Temperature, °C</th>
<th>Rotational Viscosity, Pa.s</th>
</tr>
</thead>
<tbody>
<tr>
<td>140</td>
<td>7.0</td>
</tr>
<tr>
<td>150</td>
<td>6.0</td>
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<tr>
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<td>5.0</td>
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<tr>
<td>200</td>
<td>1.0</td>
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<tr>
<td>210</td>
<td>0.0</td>
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</tbody>
</table>
MACSEAL 6690-2

HOT-APPLIED JOINT & CRACK SEALANT ASTM 6690 TYPE II & III OR EQUIVALENT

APPLICATION GUIDELINES
For detailed MACSEAL 6690-2 joint and crack preparation or specific application instructions, refer to specifying agency publications or contact your McA Marketing representative.

APPLICABLE SPECIFICATIONS
MACSEAL 6690-2 meets or exceeds
- ASTM D-6690 Type II (formerly ASTM D-3405)
- AASHTO M 324-04
- Federal Specification SS-S-1401-C
- FAA Specification P-605 Type III
- CORPS of Engineers CRD-C530
- Various State and Provincial D.O.T. specifications

APPLICATION TEMPERATURES
Recommended pouring temperature: 185°C (365°F)
Maximum safe heating temperature: 200°C (392°F)

MELTING EQUIPMENT
MACSEAL 6690-2 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 melting vat.

COVERAGE
MACSEAL 6690-2 weighs approximately 1.20 kg/L (10 lb/gal). A 12.7 mm x 12.7 mm (½ x ½”) joint requires approximately 19.4 kg per 100 lineal meters or 13 lb per 100 lineal feet.

PACKAGING, STORAGE AND HANDLING
MACSEAL 6690-2 is available in the following packaging:
- 220 kg (485 lb) open top drums containing 10 individual pucks of roughly 22.0 kg (48.5 lb). MACSEAL 6690-2 in drums can be stored inside or exposed to the elements.
- 2 x 25 lb polybags in a high strength corrugated cardboard container. MACSEAL 6690-2 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 6690-2 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.