1. PRODUCT NAME
CrackMaster 3405
Hot Pour Crack Sealant

2. MANUFACTURER
ThorWorks Industries, Inc.
2520 S. Campbell St.
Sandusky, OH  44870
Phone:  800-326-1994
Fax: 419-626-5477
www.thorworks.com

Additional Plant Locations:
SealMaster has a nationwide network of manufacturing and distribution facilities.
Phone 1-800-395-7325 or visit website at www.sealmaster.net to find the location near you.

3. PRODUCT DESCRIPTION & BENEFITS
CrackMaster 3405 is a single component, hot applied crack and joint sealant. When melted and properly applied it forms a resilient crack sealant for both asphaltic and cementatious pavements. CrackMaster 3405 meets ASTM-D3405, ASTM-D6690 Type II and III, AASHTO M324, Type II, ASTM D3405, and SS-S-1401C (see chart below).

Environmental Considerations:
CrackMaster 3405 is considered a non-hazardous material.

5. INSTALLATION
Proper surface preparation will facilitate adequate adhesion and consequently the maximum service life of the sealant. The crack must be free from moisture, dust, and loose aggregate. Routing or wire brushing are preferred methods followed by a compressed air heat lance immediately prior to sealing. The substrate and air temperature must be above 40°F.

Methods: CrackMaster 3405 shall be melted in a conventional oil-jacketed unit equipped with an agitator and temperature control device for both material and heat transfer oil. Carefully insert blocks of material (with plastic bag) into melting equipment with agitator turned off. Load material slowly to avoid splashing. After the initial load of material has reached the recommended pouring temperature (370-390°F), fresh material may be added as sealant is used. Melt only enough material that will be used the same day. Avoid overheating material. Excessive heat could cause material to gel in the equipment or fail in crack and joints. A significant viscosity increase accompanied by stringiness signals the approach of gelation. If this occurs, immediately remove the material from the melter and dispose of it.

LIMITED: Protective apparel is recommended with application of CrackMaster 3405. The extremely hot material will cause severe burns on contact with skin. OSHA Safety Regulations require workers to wear the following types of safety attire (see current OSHA/Safety Regulations for additional information): Hard hat with face shield; long sleeved shirt buttoned at the wrist; heat resistant gloves; long, cuffless pants; and safety toed work boots. Make certain all area around melter is clear of all debris and flammable materials. Avoid breathing vapors. Use with adequate ventilation.

Mixing Procedures:
Use material as supplied. Do not blend with other materials. After CrackMaster 3405 is melted it should be agitated or recirculated.

Geographical Performance of CrackMaster 3405

| Pavement Temperatures (Fahrenheit) | -40 | -30 | -20 | -10 | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 |
|-----------------------------------|-----|-----|-----|-----|---|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Recommended                      |    |    |    |    |   |    |    |    |    |    |    |    |    |    |     |    |    |    |    |    |    |    |    |
| Limited                           |    |    |    |    |   |    |    |    |    |    |    |    |    |    |     |    |    |    |    |    |    |    |    |
| Not Recommended                  |    |    |    |    |   |    |    |    |    |    |    |    |    |    |     |    |    |    |    |    |    |    |    |

Chemical & Physical Analysis

Recommended Pour Temperature .............................................. 370-390°F
Maximum Heating Temperature .............................................. 410°F
Cone Penetration at 25°C ................................................... 90 Max.
Resiliency ........................................................................ 50% Min.
Flow at 140°F ...................................................................... 3 mm Max.
Bond: -20°F/50% Ext. ..................................................... Passes 3 cycles
Bond: 0°F/100% Ext. ........................................................... Passes 3 cycles
Bond, water immersed ...................................................... Passes 3 cycles at 50% ext. at -29°C
Specific Gravity .................................................................... 1.14
Asphalt Compatibility .......................................................... Compatible
Viscosity ........................................................................... 36 ± 20 poise
**Application:** Apply heated CrackMaster 3405 using either a pump and wand system or a pour pot. For best results the sealant depth to width ratio should not exceed 2 to 1 (i.e. 2-inches deep to 1-inch wide). The cooled sealant height should not exceed 1/8” above surrounding pavement. Using a sealing shoe or squeegee, band the material 2 to 3 inches wide over the crack.

**Estimating Material Requirements:**
Use the following chart as a guideline for estimating material requirements (based upon pounds of material needed for 100 feet of cracks):

<table>
<thead>
<tr>
<th>Crack Width</th>
<th>Depth</th>
<th>lbs/100feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8”</td>
<td>3/8”</td>
<td>6.9 lbs.</td>
</tr>
<tr>
<td>3/8”</td>
<td>1/2”</td>
<td>9.3 lbs.</td>
</tr>
<tr>
<td>1/2”</td>
<td>1/2”</td>
<td>12.3 lbs.</td>
</tr>
<tr>
<td>1/2”</td>
<td>1”</td>
<td>24.7 lbs.</td>
</tr>
<tr>
<td>3/4”</td>
<td>1/2”</td>
<td>18.5 lbs.</td>
</tr>
<tr>
<td>3/4”</td>
<td>3/4”</td>
<td>27.8 lbs.</td>
</tr>
</tbody>
</table>

The above coverage rates are only a guideline. Actual material usage may vary due to width of application and thickness of material above pavement surfaces.

**Precautions:** Cracks must be free from moisture, dust, dirt, and debris. Both substrate and air temperature must be above 40°F. Keep boxes of material dry during storage. Do not store in direct sunlight.

**6. AVAILABILITY & COST**

**Availability:** CrackMaster Hot Pour Crack Sealants are supported by a nationwide network of SealMaster facilities along with a national and international network of professional applicators.

**Cost:** Cost information can be obtained from a local SealMaster CrackMaster applicator. Contact SealMaster for the CrackMaster representative in your area.

**7. WARRANTY**
SealMaster warrants that CrackMaster 3405 meets the chemical composition and performance requirements set forth in section 4. Liability to the buyer or user of this product is limited to the replacement value of the product only.

**9. TECHNICAL SERVICES**

**Manufacturer:** Complete product specifications, material safety data sheets, and technical assistance is available from SealMaster.

**Professional Applicators:** Your local CrackMaster applicator is available to provide on-site inspections and recommendations to meet your specific needs.

**10. FILING SYSTEMS**

- SealMaster Online Specification at [www.sealmaster.net](http://www.sealmaster.net)
- Complete SealMaster Product and Equipment Catalog Available
- Sweet’s Catalog
- Sweet’s CD
- Sweet’s Online
- Sweet’s Directory

The statements made on this specification sheet are believed to be true and accurate and are intended to provide a guide for approved application practices. As workmanship, weather, construction, condition of pavement, tools utilized, and other variables affecting results are all beyond our control, the manufacturer warrants only that the material conforms to product specifications and any liability to the buyer or user of this product is limited to the replacement value of the product only. The manufacturer expressly disclaims any implied warranties of merchantability or fitness for a particular purpose. Warranty is void on multi-coat applications if material made by other manufacturers is used with this product.