**MEGUM™ 5382**

**Description**

MEGUM™ 5382 is a cover coat adhesive used for bonding rubber compounds to various metals and other rigid substrates during vulcanization. MEGUM™ 5382 may be used as one coat for some applications. This product is especially suitable for bonding both difficult to bond compounds and soft compounds. For conditions where environmental resistance may be needed, MEGUM™ 5382 adhesive should be used in combination with MEGUM™ or THIXON™ primers. These same primers can be used to enable bonding to thermoplastics such as polyamides and polyesters.

**Benefits & Features**

MEGUM™ 5382 is suitable for bonding both difficult to bond compounds and soft compounds used in NVH applications. The product applies easily by brush, dip or spray methods and provides durable bond resistance to a variety of elements. MEGUM™ 5382 accommodates a wide range of processing conditions including extended prebake.

<table>
<thead>
<tr>
<th>Uncured Properties</th>
<th>Nominal Value</th>
<th>Unit</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Black</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solids Content</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>13 %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>21 to 24 %</td>
<td></td>
<td>ASTM D2369</td>
</tr>
<tr>
<td>Density</td>
<td>0.973</td>
<td>g/cm³</td>
<td>ASTM D1475</td>
</tr>
<tr>
<td>Dry Film Density</td>
<td>2.0</td>
<td>g/cm³</td>
<td></td>
</tr>
<tr>
<td>VOC Content</td>
<td>6.30</td>
<td>lb/gal</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>26.0</td>
<td>°C</td>
<td>DIN 53213</td>
</tr>
<tr>
<td>Viscosity ³ (20°C, Brookfield RVT)</td>
<td>0.25 to 0.65</td>
<td>Pa·s</td>
<td>ASTM D1084</td>
</tr>
<tr>
<td>Viscosity (20°C)</td>
<td>26 to 60</td>
<td>sec</td>
<td>Zahn Cup 3</td>
</tr>
<tr>
<td>Theoretical Coverage ⁴</td>
<td>7.60</td>
<td>m²/l</td>
<td></td>
</tr>
<tr>
<td>Recommended Film Thickness</td>
<td>18</td>
<td>µm</td>
<td></td>
</tr>
<tr>
<td>Recommended Film Thickness Range</td>
<td>20 to 30</td>
<td>µm</td>
<td></td>
</tr>
<tr>
<td>Shelf Life ⁵ (25°C)</td>
<td>12</td>
<td>month</td>
<td></td>
</tr>
</tbody>
</table>

**Elastomer**

NR, IR, SBR, BR, EPDM, IIR, CR, NBR, etc.

**Substrate**

CRS, SS, Cu, Brass, Zn and Mg Alloys with a THIXON™, MEGUM™ or ROBOND™ Primer.

**Surface Prep**

Review Dow’s rubber-to-substrate bonding agent application guide or contact your account manager.

**Mix Instructions**

Diluents - Aromatic solvents, such as toluene or xylene

First, thoroughly mix MEGUM™ 5382 with a high speed propeller-type agitator. If diluting, slowly add the diluent to the adhesive while mixing constantly.

Continue to mix MEGUM™ 5382 while spraying or dipping to keep the dispersed solids from settling to the bottom. This will assure that a homogeneous mixture of the adhesive is applied.

- 1 part adhesive: 0 part diluent - estimate 22.0% theoretical solids
- 1 part adhesive: 0.1 part diluent - estimate 20.0% theoretical solids
- 1 part adhesive: 0.2 part diluent - estimate 18.3% theoretical solids
- 1 part adhesive: 0.3 part diluent - estimate 16.9% theoretical solids
- 1 part adhesive: 0.5 part diluent - estimate 14.7% theoretical solids
- 1 part adhesive: 0.8 part diluent - estimate 12.2% theoretical solids
Application Technique

Brushing: use product undiluted.

Dipping: dilute 1 part product with 0.2-0.3 parts diluent.

Spraying: dilute one part product with 0.3-0.7 parts diluent.

Drying the Film

The drying time is approximately 30 minutes at 20°C (68°F). The drying time can be shortened by force drying five minutes at 80°C (176°F). Do not dry at temperatures above 121°C (250°F).

Molding and Curing

Can be used with all common molding and curing methods. Cure temperatures between 130°C and 190°C (265°F and 375°F) are recommended.

Pre-Bake Resistance

Coated inserts can be pre-baked for 5-10 minutes at 160°C (320°F) without adversely affecting bond quality.

Dry Film Stability

Excellent dry film stability. Inserts coated with product can be stored for several weeks if protected from contaminants.

Clean-up

Equipment clean up should be done using recommended dilution solvents.

Packaging/Sizes Available

Drums, pails and cans.

Storage & Stability

The shelf life of this material is assured for 12 months (from the date of manufacture) at temperatures below 78°F in an unopened container.

Toxicity and Safety Information

Read the Safety Data Sheet before using this material. Toxicity and safety information is included in the SDS.

Food Contact Applications

Dow Automotive products are not approved for direct or indirect food contact or drinking water applications. If your applications include food contact or drinking water requirements, please contact your Dow representative. For more information on the regulatory status of this product, please refer to the SDS for this product.

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

1 By volume

2 Non-volatile solids by weight

3 Spindle #2, @ 30 RPM

4 Applied at a dry film thickness of 0.7 mil

5 Unopened
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