V-Damp® 3680
Vibration Damping Material

V-Damp® 3680 is highly effective in reducing vibrational resonance conditions in structures such as sheet metal panels, floor housings, stainless sinks, and a multitude of other applications. V-Damp® 3680 will dissipate structure-borne vibrational energy and reduces radiated air-borne noise.

It is non-toxic, non-flammable, odorless and exhibits exceptional aging characteristics.

V-DAMP® 3680

Water-based and non-toxic, V-Damp® 3680 offers an efficient and effective alternative to solvent-based sprayable damping products. Available in 55-gallon drums and 5-gallon pails, V-Damp® 3680 can be sprayed or troweled directly from the drum without thinning. During application V-Damp® 3680 cleans up with water.

A typical setup to spray V-Damp® 3680 consists of a 30:1 airless pump, a reverse-a-clean airless gun with a tip size of 0.035", a ram and a surge suppressor.

V-Damp® 3680 exhibits exceptional adhesion to a variety of materials when applied over properly prepared surfaces. V-Damp® 3680 will air dry within 4 to 8 hours at room temperature depending on film builds. The drying time can be accelerated through air movement or oven drying using moderate temperatures.

V-Damp® 3680 passes the following tests:

1. Sound Damping Properties per Geiger Thick Plate Test Method. It has a 46.1 decibels per second rating, at 0.5 lbs., (70 °F) dry per square foot.

Sound Damping Properties per Oberst Bar Test Method SAE J-1637. Composite Loss Factor of 0.07 at 200 Hz and 77 °F, V-Damp® to metal ratio of 1:1 (V-Damp® at 32 mils and steel bar at 32 mils).

2. Cold adhesion – when V-Damp® 3680 is applied to a 10" x 10" x 0.035" panel of primed cold rolled steel at the rate of 0.5 lbs./sq. ft. (dry weight), shows no loss of adhesion when subjected to two 25 inch-lb. impacts from a two inch diameter, 1 ¼ lb., steel ball at –20 °F.


4. National Bureau of Standards and NFPA 258. Flaming and smoldering tests were conducted in an Aminco NBS Smoke Density Chamber, Cat. No. 4-5800. Test results available on request.

APPLICATION
Surface must be clean and free of oil and all foreign matter. Adhesion is very good on stainless steel, bonderized steel, primed steel, wash-primed galvanized sheet metal, and wash-primed aluminum. Daubert Chemical recommends that if the application requires corrosion protection, that a corrosion preventive primer for the substrate to be protected be used. V-Damp® 3680 can be top-coated with any high quality latex paint.
Conventional or airless spray mastic type equipment can be used.

Conventional Spray – Use a round ¼” spray tip, ¾” i.d. material hose, a Graco Mastic type pump 8:1 or 10:1 ration or equivalent.

Airless Spray - 0.043” – 0.051” spray tip, ¾” i.d. material hose, a Graco Hydra-Mastic Pump 30:1 ratio or greater.

**Drying Time**

1/32” (32 mils) wet film at room temperature dries hard in 3-4 hours.
9/64” (140 mils) wet film at room temperature dries hard in 12 hours.
Heavier film greater than 140 mils should be applied in two coats
Where faster drying time is required, use forced ventilation, heat or infra-red light. Keep artificial heat below 200 °F to avoid blisters.

**Thinning** Product is ready for use as received. If conditions should require thinning, use water sparingly.

**Cleanup** Spray equipment may be flushed with water after use.

**Physical Properties (Typical)**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Light Tan</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Sprayable Mastic Consistency</td>
</tr>
<tr>
<td>Solids by Weight</td>
<td>55%</td>
</tr>
<tr>
<td>Solids by Volume</td>
<td>40.8%</td>
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<tr>
<td>Weight/Gallon</td>
<td>10.95</td>
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<tr>
<td>Flash Point</td>
<td>None</td>
</tr>
<tr>
<td>VOC (EPA Method #24)</td>
<td>0 lbs./gal. (water-based coating)</td>
</tr>
<tr>
<td>Non-Bleeding</td>
<td>Non-Asphaltic</td>
</tr>
<tr>
<td>Odor After Drying</td>
<td>None</td>
</tr>
<tr>
<td>Latex Emulsion</td>
<td>Protect From Freezing</td>
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</tbody>
</table>

**Note:** V-Damp® 3680 is not intended for direct outdoor weathering. The weathering resistance of V-Damp® 3680 can be improved by painting with high quality latex house paint. CONSULT MSDS BEFORE USE.

**June 22, 2010:**kc