DECIDAMP® SP500

water based vibration damping compound for premium applications

Decidamp® is a fast drying, water based viscoelastic vibration damping compound.

Optimised to suit transport and industrial applications, the advanced formula was developed for acoustic improvement of structures that are exposed to vibration and impact sound.

Decidamp damping compound is a lightweight, non-hazardous structural damping material that is suitable for exterior and interior use with easy application by simply spraying, rolling or trowelling onto surfaces. Once dry, the cured film is UV, water and chip resistant and exhibits low combustibility, it effectively absorbs and dissipates vibrational energy from the flexural stress of the base structure and reduces panel coincidence dip and resonance effects.

A superior extensional damping compound, it is suitable for applications to structures (fibreglass, aluminium, and steel, including stainless steel) where sound damping is required. Compliance to the latest international fire rail regulations, such as EN45545, makes it the ideal choice for premium transport applications.

applications

- Rail: carriages, body panels, locomotive, cabin walls and roofing, shells and flooring.
- Machinery or industrial enclosures
- HVAC applications, plant rooms, substations
- Automotive
- Exit ways, smoking areas, stairwells
- Road barriers, exterior plant fence
- Metal floors, deck roofing, wall cladding

features

- Compliance to EN45545
- Advanced, non-sag formulation
- Excellent adhesion to fibreglass, aluminium, and steel - including stainless steel
- Water based
- Reduces vibrational structural wear/tear
- Suitable for outdoor exposure
- Excellent flame resistance, ignition retardant
- Broad temperature and frequency range
- Ideal for weight sensitive applications - lightweight
- High chip resistance

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Colour</th>
<th>Grey standard, other colours available based on minimum quantities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging</td>
<td>20 kg pail</td>
</tr>
<tr>
<td></td>
<td>220 kg drum</td>
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</tbody>
</table>
PRODUCT SPECIFICATIONS

<table>
<thead>
<tr>
<th>Colour</th>
<th>UOM (kg)</th>
<th>Density (dry)</th>
<th>Service temp range (max short term)</th>
<th>pH</th>
<th>Chemical resistance</th>
<th>Coating thickness (dry film)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GREY (STANDARD)</td>
<td></td>
<td></td>
<td>-40° to 120° (Report No. 29513A1)</td>
<td>8</td>
<td>UV excellent</td>
<td>petroil good</td>
</tr>
</tbody>
</table>

Note:
1. T = Substrate Thickness.
2. Can be applied up to 0.5 mm wet film per coating session without slumping. Typically, Decidamp is built up over two sessions of 3 mm wet coats allowing 20-40 minutes between each application.
3. Typically, a 3 mm thickness coating dries within 3-4 hours and a 6 mm thickness coating dries within 24 hours, at 35°C and relative humidity of 55%. For test results, allow the compound to dry naturally as force drying may result in cracking of coat. Decidamp will fully cure within 2-3 days. In humid environments, Decidamp will take longer to cure. In environments greater than 50% humidity, the application rate and curing time will vary.
4. Decidamp SP500 and substrate temperatures need to be greater than 10°C during application.
5. To achieve a desired dry film thickness, provision for material shrinkage of up to 15% on average should be included when applying wet coating.

Storage: Store between 10°C - 45°C
Shelf Life: 24 months from receiving goods (stored under recommended conditions).

MATERIAL PROPERTIES

<table>
<thead>
<tr>
<th>Test Method</th>
<th>Property</th>
<th>Report No.</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brookfield T-D spindle 1RPM</td>
<td>Viscosity</td>
<td>-</td>
<td>200x10^3 - 350x10^3 cP</td>
</tr>
<tr>
<td>EN 45545-2 (ISO 5658-2)</td>
<td>Spread of flame</td>
<td>362501</td>
<td></td>
</tr>
<tr>
<td>EN 45545-2 (ISO 5660-1 : 50kWm^2)</td>
<td>Heat release rate by cone calorimeter</td>
<td>360850</td>
<td></td>
</tr>
<tr>
<td>EN 45545-2 (ISO 5659-2 : 50kWm^2)</td>
<td>Smoke generation (optical density)</td>
<td>360852</td>
<td></td>
</tr>
<tr>
<td>EN 45545-2 (ISO9239-1)</td>
<td>Reaction to fire tests for flooring</td>
<td>043/17</td>
<td></td>
</tr>
<tr>
<td>EN 45545 (ISO 5660-1 : 25kWm^2)</td>
<td>Spread of flame</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>EN 45545 (ISO 5660-1 : 25kWm^2)</td>
<td>Smoke generation (optical density)</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>ASTM D3170</td>
<td>Chipping resistance of coating</td>
<td>RES 154479-01</td>
<td>10A</td>
</tr>
</tbody>
</table>

*Material tested on 15 mm thick PIR board

ACOUSTIC PERFORMANCE

Decidamp SP500

Temperature (°C)

How to read a reduced frequency nomogram:
1. Start by selecting the frequency (Hz) on the right-hand vertical axis.
2. Follow this value horizontally to the left where the diagonal temperature isotherm intersects.
3. Draw a vertical line through the frequency and isotherm intersection, find the point where this line intersects the modulus and loss factor curve.
4. Draw horizontal lines from these points to the left-hand vertical axis to read the values.