

DECIDAMP® SP450

water based vibration damping compound for interior rail 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 interior use with easy application by simply spraying, rolling or trowelling onto surfaces. Once dry, the cured film is 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.

An advanced extensional damping compound, it is suitable for application 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 interior transport applications.

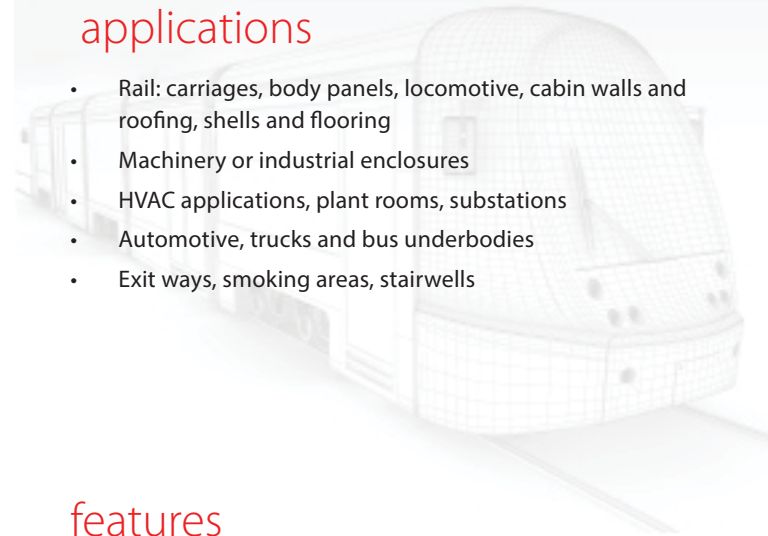
SPECIFICATIONS

Colour	Grey standard, other colours available based on minimum order quantities
Packaging	20 kg pail
	300 kg drum



applications

- Rail: carriages, body panels, locomotive, cabin walls and roofing, shells and flooring
- Machinery or industrial enclosures
- HVAC applications, plant rooms, substations
- Automotive, trucks and bus underbodies
- Exit ways, smoking areas, stairwells



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
- Reduce noise and dynamic stress
- Excellent flame resistance, ignition retardant
- Broad temperature and frequency range
- Ideal for weight sensitive applications - lightweight
- High chip resistance



PRODUCT SPECIFICATIONS

Colour	UOM (kg)	Density (dry)	Service temp range (max short term)	pH	Chemical resistance				Coating thickness (dry film)		
GREY (STANDARD)	20 kg PAIL	1.6 g/cm ³	-40 °C to 120 °C (Report No. 29513AR)	8	UV excellent	water very good	petrol good	diesel good	steel ≥ 1.0 x T	aluminium ≥ 0.5 x T	FRP ≥ 0.3 x T
	300 kg DRUM										

Note

1. T= Substrate Thickness.

2. Can be applied up to 6 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 is touch dry in 24 hours, at 35 °C and relative humidity of 55%. For best results, allow the compound to dry naturally as force drying may result in cracking of coat. Decidamp can take up to 1 week to fully cure depending on environmental conditions.

4. Decidamp SP450 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.

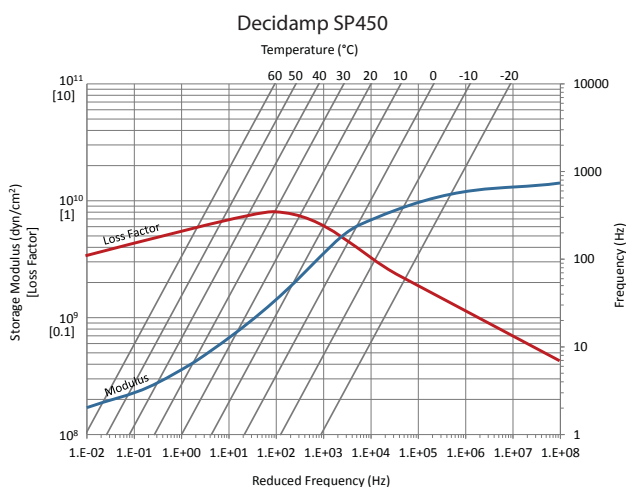
Storage: Store between 10 °C - 45 °C

Shelf Life: 24 months from receiving goods (when stored under recommended conditions).

MATERIAL PROPERTIES

Test Method	Property	Report No.	Results
Brookfield T-D spindle 1RPM	Viscosity	-	250x10 ³ - 400x10 ³ cP
EN 45545-2 (ISO 5658-2)	Spread of flame	362498	R1, R7, R8 HL3 (Suitable for most interior surfaces and cavities in railway vehicles of operation categories 1, 2 & 3)
EN 45545-2 (ISO 5660-1 : 50kWm ⁻²)	Heat release rate by cone calorimeter	361664	
EN 45545-2 (ISO 5659-2 : 50kWm ⁻²)	Smoke generation (optical density)	361666	
ASTM E 162	Surface flammability	101731845MID-001d	- Complies for US (FRA) Federal railroad administration requirements and requirements of NFPA 130 - Complies for US (DOT) Department of transportation requirements for acoustic insulation of transit bus and vans (Docket 90A)
ASTM E 662	Optical Density of Smoke generated during fires	101731845MID-002d	
ASTM E 800 (SMP-800C)	Gases Present or generated during fires	101731845MID-003d	No test criteria, results available upon request
BSS 7239	Toxic Gas Generation by Materials on combustion	g102774171MID-001	
ASTM D3170	Chipping resistance of coating	RES 154479-02	10A
FMVSS 302	Flammability of interior materials	25716BD1	- Complies to the requirements of US (DOT) Department of transportation for occupant compartments of motor vehicles

ACOUSTIC PERFORMANCE



Tested to ISO 6721-5:1996

Report Number:12716AR3

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 to 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 curves.
4. Draw horizontal lines from these points to the left-hand vertical axis to read the values.

For further information and contact details, please visit our website pyroteknc.com

Caveats: Specifications are subject to change without notice. The data in this document is typical of average values based on tests by independent laboratories or by the manufacturer and are indicative only. Materials must be tested under intended service conditions to determine their suitability for purpose. The conclusions drawn from acoustic test results are as interpreted by qualified independent testing authorities. Nothing here releases the purchaser/user from responsibility to determine the suitability of the product for their project needs. Always seek the opinion of your acoustic, mechanical and fire engineer on data presented by the manufacturer. Due to the wide variety of individual projects, Pyrotek is not responsible for differing outcomes from using their products. Pyrotek disclaims any liability for damages or consequential loss as a result of reliance solely on the information presented. No warranty is made that the use of this information or of the products, processes or equipment to which this Information Page refers will not infringe any third party's patents or rights. DISCLAIMER: This document is covered by Pyrotek standard Disclaimer, Warranty and © Copyright clauses. See pyroteknc.com/disclaimer.

