

DECIDAMP® SP150

water-based vibration damping compound



Decidamp® SP150 is a fast drying, water-based viscoelastic vibration damping compound and adhesive. Previously known as Soundpaint, this advanced formula was developed for acoustic improvement of structures that are exposed to vibrations and impact. It effectively absorbs and dissipates vibrational energy from the flexural stress of the base structure and reduces panel coincidence and resonance effects.

Decidamp SP150 is a lightweight, non-toxic structural damping material developed with a special polymer technology. It is suitable for interior use and areas where noise can impact structure, comfort and function.

Decidamp SP150 is designed for the marine industry due to its exceptional fire-resistant properties and compliance with international fire codes. The product is easy to apply by simply spraying, rolling or trowelling onto surfaces. Once dry, the cured film is UV, water and chip resistant and exhibits low combustibility.

Decidamp SP150 is a superior extensional damping compound suitable to be applied directly to structures (steel, fibreglass and alloys) where sound damping is required. Available in grey as standard or other colours can be ordered.

Low-density properties and its excellent performance-to-weight ratio make it the ideal choice for weight sensitive applications.

VOC, ODP, HEALTH AND SAFETY

Decidamp SP150 is non-toxic and safe to handle by methods prescribed in the Safety Data Sheet.

SPECIFICATIONS

Colour	Standard grey Other colours available depending on MOQ
Available	Pail: 20 kg, 5 gal
	Drum: 300 kg, 55 gal



applications

- Marine: boat hulls, ceilings, decks and bulkheads
- Machinery and industrial equipment enclosures
- HVAC, plant rooms, substations
- Automotives and heavy earthmoving equipment
- Stainless steel applications (sinks, bowls)
- Hospital equipment
- Whitegoods and dishwashers
- Metal floors, deck roofing, wall cladding

features

- Non-sag formulation
- Excellent adhesion, even to aluminium
- Water-based and non-hazardous
- Cures to chip-resistant finish
- Excellent flame resistance and ignition retardant
- Broad temperature and frequency range
- Lightweight - ideal for weight sensitive applications
- Minimum weight for maximum performance
- Increases panel transmission loss
- Reduces resonant vibration and eliminates tinniness and ringing
- Easy application and clean up (sprayable)
- Can be painted/gel coated over once cured
- Tested to International marine fire standards
- Extensional damping



PRODUCT SPECIFICATIONS

Colour	UOM	Weight	Service temperature (max short term)	pH	Chemical resistance			
Grey (Standard)	20 kg (5 gal) Pail	1.6 kg/m ² /mm DFT	-40 °C to 120 °C (-40 °F to 248 °F)	8	UV excellent	water very good	petrol good	diesel good
	300 kg (55 gal) Drum							

To achieve a desired dry film thickness (DFT), provision for material shrinkage of up to 15% on average should be included when applying wet coating.

When coating thickness requirement is not specified, general recommended coating thickness (dry film) is $\geq 1.0 \times T$ for steel, $\geq 0.5 \times T$ for aluminium, $\geq 0.3 \times T$ for FRP, where T = substrate thickness.

Other thicknesses may be installed to achieve desired damping performance.

Storage: Store between 10 °C to 45 °C (50 °F to 113 °F).

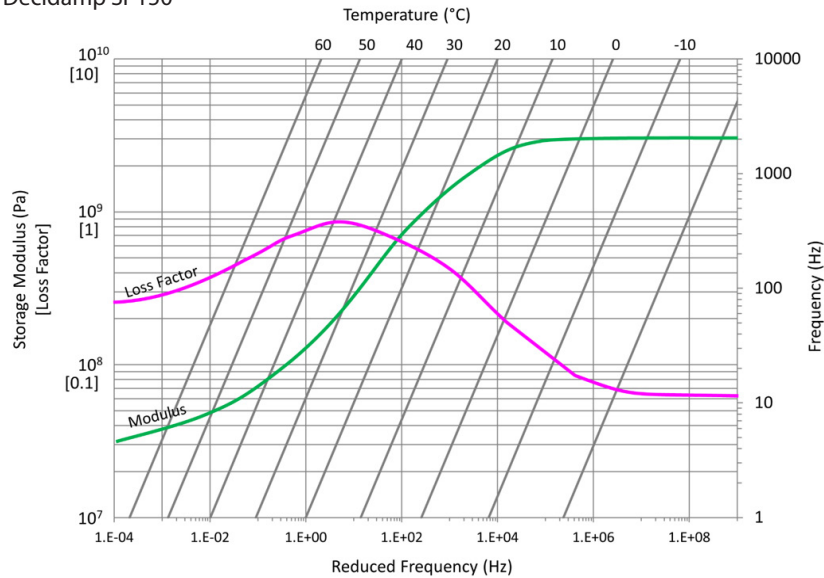
Shelf Life: 24 months from receiving goods (stored under recommended conditions).

MATERIAL PROPERTIES

Test method	Property	Report	Results
IMO FTP Annex 1 Part 5	Surface flammability	363367	Complies for bulkhead, walls, floors and ceiling linings up to 10 mm thickness on metallic substrate. USCG Type approval granted.
IMO FTP Annex 2	Smoke and toxicity	363367	
MED B	EC Type Certificate (Module B) for Marine Equipment Directive	MEDB000074U MEDB00005C7	
MED D	EC Type Certificate (Module D) for Marine Equipment Directive	MEDD000028J MEDD00001VB	
Class NK approval	Nippon Kaiji Kyokai Type Approval	Certificate No. TA18437E(N) Type approval no. 18FPA50PT	Suitable for installation on Nippon Kaiji Kyokai classed vessel and offshore installations.
ISO 1716	Heat of combustion	g103569392-mid-001	1840 kJ/kg
Brookfield Viscosity	Brookfield Viscosity T-D spindle 1 RPM	26125RV	150x10 ³ to 300x10 ³ cP
ISO 4624	Pull-off test for adhesion	01128-25-01Rev01	4.6 MPa
ISO 12944-6 ISO 6270-1 ISO 9227	Corrosion resistance by water condensation and natural salt spray	01128-25-01Rev01	Complies - Very high durability in C3 corrosion category

ACOUSTIC PERFORMANCE

Decidamp SP150



Tested to ISO 6721-5:1996

Report Number: 06624CD

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.

ACOUSTIC PERFORMANCE

Decidamp SP150 Computed Material Properties

	Octave Band Center Frequency (Hz)								
	31.5	63	125	250	500	1000	2000	4000	8000
Loss Factor	0.24	0.29	0.32	0.33	0.29	0.25	0.19	0.14	0.09
Young's Modulus (GPa)	3.0	3.0	3.0	3.0	3.3	3.7	4.5	6.0	7.0

Report No: NCE 21-040

LOSS FACTOR MEASUREMENTS

Substrate	Acoustic Treatment	Thickness Ratio	Weight of Acoustic Treatment (Kg/m ²)	Average System Loss Factor (50-2kHz)
6 mm Aluminum	3 mm Decidamp SP150	0.5	5.0	0.043
8 mm Aluminum	4 mm Decidamp SP150	0.5	7.0	0.04
5 mm Steel	2.5 mm Decidamp SP150	0.5	3.7	0.02
5 mm Steel	5 mm Decidamp SP150	1	7.7	0.051

Report No 7068B

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.

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