0575

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 300 kg (55 gal) Drum	1.6 kg/m²/mm DFT	-40 °C to 120 °C (-40 °F to 248 °F)	8	UV excellent	water very good	petrol good	diesel good

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 >= 1.0 x T for steel, >= 0.5x T for aluminium, >= 0.3 x 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).

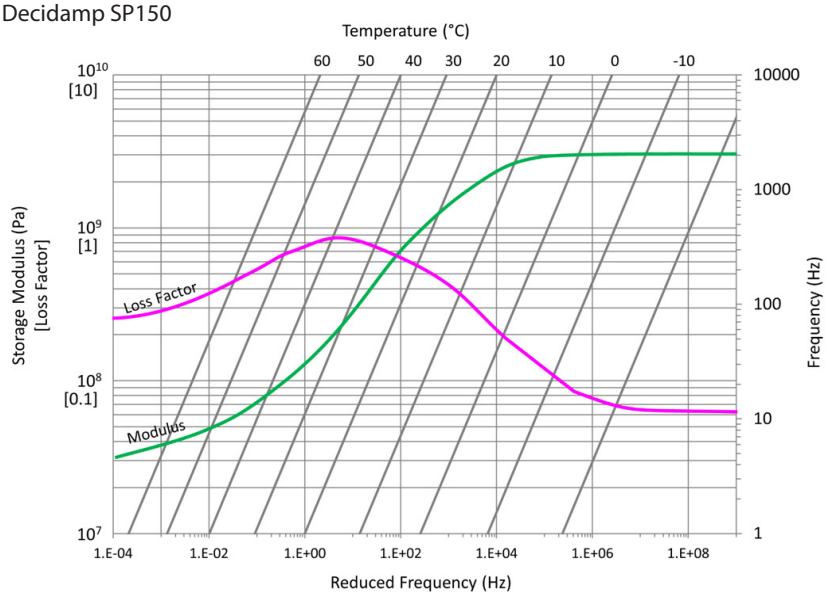
Shelf Life: 24 months from receiving goods (stored under recommended conditions).

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	20216BD	200x10³ to 400x10³ 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 Treament	Thickness Ratio	Weight of Acoustic Treament (Kg/m^2)	Average System Loss Factor (50-2khz)
6 mm Alumminum	3 mm Decidamp SP150	0.5	5.0	0.043
8 mm Alumminum	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