



122IP 09/12 Vibradamp® DC30 Information Page

Two Component Polyurethane Damping Paste



Vibradamp® DC30 is a two-component polyurethane based damping paste, which works best in a constrained layer configuration, (sandwich system) where maximum advantage can be taken of its excellent viscoelastic damping properties. This in turn results in substantial reductions in structure-radiated air-borne sound.

It performs well over a wide temperature and frequency range, enabling it to be used in a multitude of applications especially in marine environments.

Vibradamp DC30 is applied to a metal or plastic counterplate which is then bonded to the surface that needs to be treated. During curing, it will bond to both the counter plate and surface substrate creating an excellent damping medium.

It's corrosion resistant, highly thixotropic and is able to be used on horizontal and vertical surfaces without slumping.

FEATURES

- · Excellent vibration damping properties
- Use with constraining layer / counter plate
- Able to use in horizontal, vertical and inverted applications without slumping
- Superior structure borne sound reduction
- · Fast set-up and curing time
- Long-term stability and performance in dynamic applications
- UV stabilised
- Odourless
- · Light weight compound
- Substantial reduction in structure borne noise
- Flame resistant self extinguishing meeting IMO Res A653-16
- Improved internal noise levels
- Cost effective on a weight basis
- Use on steel, aluminium and glass composite substrates
- Used in assemblies over a wide temperature range (0 to +50°C)
- High coverage per unit weight compared to alternate systems

APPLICATIONS

- Marine applications on hulls, deck and bulkheads to reduce vibration noise and structure borne noise
- Propeller and bow thruster area
- Floors, to reduce impact noise
- Heavy construction industries such as earthmoving equipment
- Portable generator and pump units
- Automotive / transport/ rail industry

PRODUCT SPECIFICATIONS

STANDARD PRODUCT	DENSITY g/cm³	PACK SIZE kg
Vibradamp DC30 Part A	1.65	10
Vibradamp DC30 Part B	1.23	1

MISCELLANEOUS PROPERTIES

MATERIAL	MIXED DENSITY g/cm³	MIX RATIO A:B w/w	THICKNESS OF APPLIED COMPOUND
Vibradamp DC30 Mixed	1.4	10:1	1 mm

APPLICATION PROPERTIES

MATERIAL	COLOUR	VISCOSITY (Brookfield T–F spindle at 1 RPM)	RECOMMENDED APPLICATION TEMPERATURE RANGE	POT LIFE at 25°C	FULL CURE @ 25°C	COUNTERPLATE
Vibradamp DC30 Mixed	Brown to Beige	2,250 K cP	10 to +35°C*	20-30 minutes*	24 hrs	1/3 of Substrate Thickness

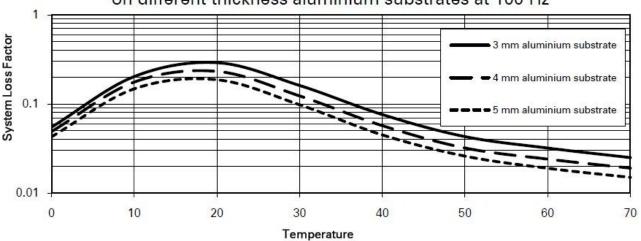
^{*} Based on cure of bulk material in a full mix of 10kg

FLAMMABILITY PROPERTIES

TEST METHOD	INDEX	RESULTS	DESCRIPTION
IMO Res A 653(16) IMO Res MSC 61(67) Annex 1 Part 5 & Annex 2 IMO Res MSC 61(67) Annex 1 Part 2 & Annex 2 (Report No. 166741)	-	Complies for bulkhead, wall, ceiling and floor	Surface flammability.
DNV EC Type Examination Certificate (Certificate No. MED-B-4636)	-	Complies	EC Certificate of Type Examination96/98/EC Module B

SYSTEM LOSS FACTOR

VIBRADAMP DC30 with a 1.5mm aluminium constraining layer on different thickness aluminium substrates at 100 Hz



OPERATING TEMPERATURE RANGE:

Once cured, Vibradamp DC30 can be used over a temperature range from 0°C to +50°C

COUNTER PLATE RATIO:

Counter plate needs to be 1/3rd the thickness of the substrate. (e.g. For a 6mm steel substrate use a 2mm steel counter plate.)

CURE TIME:

DC30 takes approx 24 hours to fully cure. Once the two components are mixed, setting will start within 30 mins at 25°C & 35% humidity. High temperatures & humidity can accelerate the set time.

COVERAGE:

1.3kg (mixed) of **DC30** will provide a 1mm thick cured layer over an area of 1m².

At temperatures above 35°C, the mixed product will cure very rapidly and require less product to be applied to achieve maximum adhesion.

CLEAN UP:

Clean up with mineral turpentine or equivalent solvent. Once cured, **Vibradamp DC30** can only be removed by sanding back.

SHELF LIFE:

Part A - 12 months from date of supply in sealed containers.

Part B - 12 months from date of supply in sealed containers.

STORAGE:

Store between 10 & 30°C. Do not allow to freeze.

Caveats: Specifications are subject to change without notice. The data in this document are 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 or mechanical engineer on data presented by the manufacturer. Due to the wide variety of individual projects, Pyrotek NC is not responsible for differing outcomes from using their products. Pyroted 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 www.pyroteknc.com/disclaimer.

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