

0575

## DECIDAMP® CLD

### constrained layer, vibration damping pad

Decidamp CLD is a constrained layer, visco-elastic damping material, designed to reduce structural vibration and sound transmission within light gauge materials. Decidamp CLD was developed to meet market noise reduction requirements in the automotive, marine, industrial and OEM markets.

To achieve this high-performance, the Pyrotek engineering team developed a product that thermally bonds three layers; a rigid outer metal layer, a viscoelastic membrane and a high-tack adhesive layer, hence the name CLD (Constrained Layer Damping).

The product achieves the highest fire ratings, complying with International Marine Organisation standards for low spread of flame, as well as British standards, achieving Class "0".

Vibration is reduced due to the introduction of shear forces between the substrate and the constraining layer on Decidamp CLD. These shear forces convert vibrational energy to heat, resulting in a damping effect.

Lightweight panel constructions such as sheet metal (steel, alloy, tin etc.) and rigid plastics (ABS and FRP etc.) can easily transmit noise when vibrational energy is introduced to the structure.

By applying Decidamp CLD to lightweight structures, the damping of the construction will increase, therefore lowering radiated noise (vibration) and improving the transmission loss.

#### VOC, ODP, HEALTH AND SAFETY

Decidamp CLD is non-toxic and safe to handle by methods prescribed in Safety Data Sheet. No Ozone depleting substances are used during the manufacture of Decidamp CLD.

#### SPECIFICATIONS

Colour	Silver
Available	Sheet sizes: 1000 mm x 1300 mm (39.4 in x 51.2 in), 500 mm x 1300 mm (19.7 in x 51.2 in)
	Thickness: 1.3 mm (0.05 in) Custom sizes available depending on MOQ



### applications

- Most effective when applied to lightweight panels and steel substrates of up to 2 mm, aluminium substrates up to 4 mm and FRP (solid) up to 6 mm thick
- Automotive floors, firewalls, doors, ceiling and boot panels
- Marine vessels: bulkheads, deckheads and hull construction
- Generators, compressor covers and machine housing guards
- Metal air-conditioning ducts and compressor housings
- Laundry and garbage chutes, hoppers, lids and bins
- Whitegoods and under sink bowls

### features

- No ozone-depleting substances are generated during manufacture
- Free from lead, odour-producing oils and bitumen
- Performance across a broad temperature range
- Lightweight and easy to handle
- Easy to install, high-tack acrylic adhesive backing, simply peel and apply pressure to position
- Easily conforms to irregular surfaces without the use of heat guns
- Remains flexible, does not become brittle
- Complies with UL94 HF-1, IMO 653.16 low spread of flame and British standards 476.6 / 7 – Class "0"
- Resistant to weather and UV light
- Available in various weights, widths and roll lengths



## PRODUCT SPECIFICATIONS

Thickness	Sheet sizes	Weight	Peel strength (180°/ Stainless Steel) (N/25 mm) AFERA 4001	Operating Temperature range
1.3 mm (0.05 in)	1000 mm x 1300 mm (39.4 in x 51.2 in) 500 mm x 1300 mm (19.7 in x 51.2 in)	2.5 kg/m <sup>2</sup> (0.5 lb/ft <sup>2</sup> )	>24	-10 to 100 °C (Continuous) (14 °F to 212 °C) -10 to 120 °C (Intermittent) (14 °F to 248 °F)

Tolerances: Length: -0/+50 mm (2 in); Width: -0/+5 mm (0.2 in); Thickness: +/- 0.5 mm (0.02 in); Weight: -0/+10%

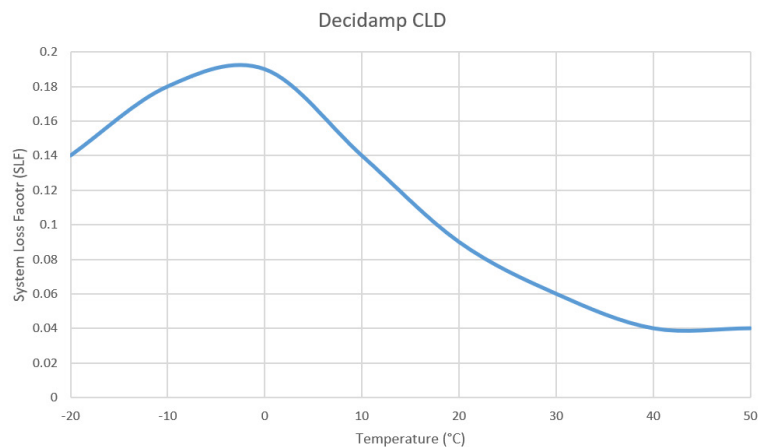
## MATERIAL PROPERTIES

Test method	Property	Report No.	Results
EN 45545-2(ISO 5658-2)	Spread of flame	SDHL1901001386RS-01	R1 R7 (HL1, HL2, HL3)
EN 45545-2 (ISO 5659-2: 50 kWm <sup>-2</sup> )	Heat release rate by cone calorimeter		
EN 45545-2 (ISO 5660-1: 50 kWm <sup>-2</sup> )	Smoke generation (optical density)		
IMO FTP Part 5	Surface flammability	327545	Complies for Bulkhead, walls and ceiling linings.
IMO FTP Annex 2	Smoke and toxicity	327545	
MED B	EC Type Certificate (Module B) for Marine Equipment Directive	164.112/1121/WCL MED0325TE	
MED D	EC Type Certificate (Module D) for Marine Equipment Directive	MEDD000015N	Complies. WHEELMARK
DNV Type approval	Type approval certification	F21138	Complies to DNV GL Offshore Standards, SOLAS & recognised as suitable for use by Transport Canada.
BS 476 part 6	Fire Propagation	315528	Complies with Class 0 Summary
BS 476 part 7	Surface spread of flame	315529	
UL94	Flammability of plastic materials	03317AC2	HF-1
FMVSS-302	Flammability of interior materials	03317AC1	Complies to the requirements of US (DOT) Department of transportation for occupant compartments of motor vehicles

## ACOUSTIC PERFORMANCE

Temperature (°C)	System Loss Factor (SLF)
-20	0.14
-10	0.18
0	0.19
10	0.14
20	0.09
30	0.06
40	0.04
50	0.04

Tested to ISO 6721-3, test report 35412BD R2.  
SLF was measured at the ~200 Hz mode & on a 1.3 mm thick mild steel substrate.



For further information and contact details, please visit our website [pyroteknc.com](http://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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