

technical data sheet

# LD5

Water-based Liquid Deadener

megasorber®

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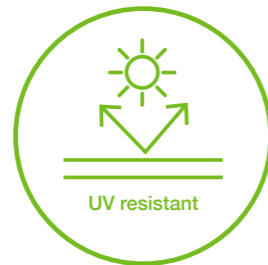
## Water-based Liquid Deadener

### High performance liquid deadener for panel vibration damping and noise control.

The exceptional vibration damping properties are complimented by fast drying, ease of use, environmental friendliness and low flammability.

LD5 is a thixotropic paste that is specially designed for all types of applications including trowel, pour, brush, roller and spray-on. Once dry the cured film is UV and water resistant whilst effectively reducing resonant vibration. LD5 works by absorbing the vibration energy within the material and converting this to heat. In addition to vibration damping, it also increases substrate transmission loss as a result of the reduction of panel coincidence and panel resonance effects.

## Key Features



High vibration damping efficiency.

Water-based, non-toxic formulation.

Fast drying.

Non-sag formulation (thixotropic).

Excellent adhesion, will not delaminate from substrates.

Water and UV resistant once dry.

## Applications

Metal roof panel and wall cladding to reduce rain impact noise.

Marine: hull panels, deck head and bulkhead damping treatment.

Transportation: buses, trucks and rail-vehicles panel damping treatments.

General industries: enclosure panel damping, hoppers and chutes, machinery guards and acoustic enclosures.

Whitegoods: dish washers damping treatment on the stainless steel panels.

Automotive: damping treatment for door panels, roof panels and floor panels

**reduces rain  
noise on  
metal roof  
panels**

# Technical Specifications

## 1. Vibration Damping Properties

AS1937. 10 -1977: Determination of damping coefficient by the thick plate method.  
Decay Rate (dB/Second) 6mm thick steel Ggeiger plate test results.

Material	Thickness	Decay Rate at:		
		25°C	40°C	60°C
Megasorber LD5	1.41mm	44 dB/s	16 dB/s	10 dB/s
	0.88mm	22 dB/s	7 dB/s	3 dB/s
	0.71mm	16 dB/s	7 dB/s	5 dB/s

The Thick Plate is 6mm thick steel plate.

ASTM E756: Standard test Method for Measuring vibration-damping Properties of materials

Damping Co-efficient (Cd) or System Loss Factor:  $\geq 0.22$

Temperature: 20°C

Frequency: 200Hz

Substrate: 1mm Thick Steel Sheet

Coating Thickness Ratio (Coating/Substrate): 1.5:1

**A system loss factor of 0.1 is equivalent to 20DB(A) noise reduction for a large freely suspended panel.**

## 2. Colour

Dark Grey

## 3. Nominal Density

Wet: 1.80 g/cm<sup>3</sup>  $\pm 5\%$

Dry: 2.0 g/cm<sup>3</sup>  $\pm 5\%$

## 4. Volume Shrinkage on Drying

Approx. 20%

## 5. Thermal Conductivity

0.21W/mK

## 6. Usage

Consumption per 1mm thick dry film:

1.8 kg per m<sup>2</sup> ( $\pm 10\%$ )

For example, the usage is about 3.6kg per m<sup>2</sup> for 3mm thick dry coating.



## 7. Fire Rating

AS1530.3.1989: Early Fire Hazard Properties: Simultaneous Determination of Ignitability, Flame Propagation, Heat Release

Ignitability	Spread of Flame	Heat Evolved	Smoke Developed
0	0	0	3

## 8. Drying Time

3mm thick wet film (touch-dry).

22°C and 65% RH: 8 hours

40°C convection: 6 hours

80°C convection: 3 hours

## 9. Application Temperature

10°C to 40°C

## 10. Service Temperature Range

-50°C to 120°C

## 11. Water Resistance

The damping performance of the dry coating will not be affected when exposed to water. Trials show the coating does not deteriorate nor delaminate from steel substrate after submerged under water for three months. It is recommended to conduct own testing, if in doubt.

## 12. Pack Size

Plastic pail: 26kg (15Lt), 32 pails per pallet.

Metal drum: 350kg (200Lt), 4 drums per pallet.

## 13. Storage

Frost-sensitive: Yes

Recommended Storage Temperature: 15°C to 20°C

Typical shelf-life (In original packaging): 12 – 24 months

## Related Products

**Megasorber D14** is a self-adhesive vibration damping sheet for substrates typical up to 3mm thick (metal panel).

**Megasorber DT2** is a self-adhesive vibration damping tile for thick substrates up to from 4mm up to 12mm thick.

Important notice and disclaimer.

Specifications are subject to change without notice. Please contact us for the latest version.

The data listed in this data sheet are typical or average values based on tests conducted by independent laboratories or by the manufacturer. They are indicative only of the results obtained in such tests and should not be considered as guaranteed maximums or minimums. Materials and installation methods must be tested under actual service to determine their suitability for a particular purpose.

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