

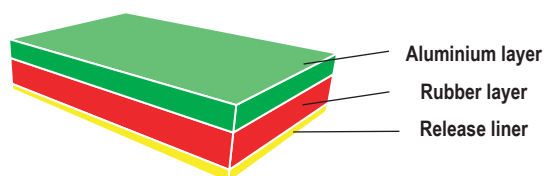
Product: **Legetolex**

Product group: **NVH Materials**

General description

Legetolex is a visco-elastic, structural damper with a high damping performance and a low weight. It consists of a thin constraining layer (aluminium or glass cloth) and a self-adhesive synthetic rubber. This combination significantly reduces vibration and noise levels.

Construction



Characteristics

Legetolex shows stable damping characteristics over a wide range of temperatures. Due to its extremely low weight, it helps to reduce the weight of the finished product.

As it has an adhesive layer, no other adhesive is required for the application.

Legetolex has an excellent workability.

The good flexibility ensures a complete contact with curved surfaces and no heat treatment is required for fabrication.

Application

Legetolex finds its use in vibration damping of sheet metal panels.

It is a typical automotive product, although other applications are very common as well (washers, dryers, ovens, etc).

By applying damping material to about 30% of the panel surface, sufficient noise reduction can be obtained.

Features

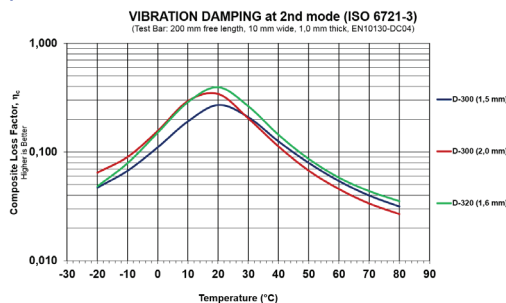
- high performance vibration damping
- extremely lightweight, reduces overall vehicle weight
- excellent adhesion on the vibrating structure thanks to the special rubber compound
- easy to apply even on curved or oily surfaces
- application possible before and after ED-paint process
- design, test and evaluation in our Automotive Technical Centre (ATC)
- robotic application possible
- improves door closure sound

Properties

Typical Value	D-300	D-300	D-320	Test method
Initial thickness	1.5 mm	2.0 mm	1.6 mm	ISO 1923
Constraining layer thickness	127 µm	127 µm	200 µm	ISO 1923
Weight	2300 g/m ²	2900 g/m ²	2500 g/m ²	ISO 845
180° Shear adhesion to steel	100 kPa	100 kPa	100 kPa	Nitto test method
Loss factor @ -10°C	0.07	0.09	0.08	ISO 6721-3
Loss factor @ +20°C	0.27	0.34	0.38	ISO 6721-3
Loss factor @ +50°C	0.08	0.07	0.09	ISO 6721-3
Transport and storage conditions Temperature 15 to 30 °C Relative humidity 20 to 75 % RH				

Remarks for robotic application transportation by cooling trucks with compartment temperatures of 5 °C - 20 °C is recommended. Before usage, the boxes should be stored in suitable cooling devices, to avoid bleeding and secure proper liner removal.

Performance properties



Warranty

The product is guaranteed to be free from defect in material and workmanship at the time of delivery and will be suitable for use for a period of 6 months thereafter, subject to the conditions set out herein.

Availability

2D Parts according to customer required dimensions.

Application guidelines

- The performance of Legetolex on specific substrate must be assured by the user before implementation.
- During storage and transport, do not over stack the product, as this may cause deformation.
- These products should be applied to clean and dry surface. Remove excess oil, moisture and dirt from the substrate surface to which the sheet is applied.
- Do not touch the adhesive surface of the sheet to avoid contamination.
- The best application conditions are obtained at a temperature between 15 °C and 40 °C.
- In order to avoid entrapped air-bubbles, tension and shear, the customer should determine appropriate application conditions.
- The adhesive of the sheet is pressure-sensitive adhesive. Apply an adequate pressure after the sheet is applied.

General conditions of use and precautions:

The properties of the product might be adversely affected by various elements such as composition, condition and surface of and impurities in or on the substrate, temperature and humidity during storage, the surrounding environment at and after application and time of exterior use. When the product is used in combination with another material or process, the user shall assure the compatibility of the product in such combination and whether this combination results in the expected performance. The same principle applies in the event of product use in extreme conditions or circumstances, whether at or after the moment of application, including extended exposure to sunlight or extreme temperatures and pressure.

Packaging, transport and storage:

During transport and storage the product should always be protected against direct sunlight and extremes in temperature and humidity and contained in its original packaging. Once removed from its packaging, it should be promptly applied and remain shielded from direct sunlight and extreme temperature as well as protected against dust and other impurities.

Liability:

Except for its wilful misconduct, Nitto Belgium's liability shall be limited to a replacement, a reimbursement or an additional delivery of the product, and shall not exceed the purchase price of the products. In no event shall Nitto be liable in respect of any indirect or consequential damages, including loss of profits. The above limitations of liability shall equally apply if Nitto Belgium has assisted in any manner with the selection, treatment or application of the product.

Product information:

This datasheet provides a general description of the product properties and application scope. Full technical details in connection with this product are presented in the customer product specification, which is available upon request.

The information reflected in this datasheet is subject to change and the product described herein may be modified or discontinued without notice.

Edition: January 2019
Code: DS/04.11/ Legetolex ENG
This datasheet replaces all previous versions

Nitto Belgium NV has obtained following certificates:

- ISO 9001
 - ISO 14001
 - IATF 16949
- Please check our website for applicable scope

If you require additional information on technical properties and application as well as product sampling or testing, please contact your local Nitto sales office.



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