

PRODUCT DATA SHEET

SikaDamp®-641

Self-adhesive, constrained layer system for vibration damping

TYPICAL PRODUCT DATA

| | | |
|--|--------------------------------|------------------------|
| Chemical base | | PIB rubber |
| Color (CQP001-1) | mastic layer | Black |
| | aluminum top layer | Silver |
| Density (CQP006-4) | mastic layer | 1.65 g/cm ³ |
| Top layer thickness (DIN ISO 1849-1/2) | | 0.3 mm |
| Total thickness (DIN ISO 1849-1/2) | | 1.3 – 4.0 mm |
| Area weight (CQP008-4) | thickness 2.0 mm | 3.6 kg/m ² |
| Loss factor (ISO 6721-3) | thickness 2.0 mm | 0.35 ^A |
| Flammability (DIN 75200) | | 0 mm/min |
| Shelf life | body or paint shop application | 4 months ^B |
| | final assembly application | 7 months ^B |

CQP = Corporate Quality Procedure

^A) at 30 °C^B) below 35 °C / 50 % r. h.

DESCRIPTION

SikaDamp®-641 is a non-curing, self-adhesive butyl-based mass used for reduction of structure borne vibration.

Processed with an aluminum constraining layer, SikaDamp®-641 is usually cut to shape by die-cut into customized shapes and sizes.

SikaDamp®-641 is a high-grade formulation with mineral fillers that offers superior damping performance over traditional dampers.

PRODUCT BENEFITS

- Superior damping properties
- Can be applied throughout the body production process
- Damping properties are unaltered by bake or operating temperature
- Application on flat or slightly curved surfaces possible
- Customized die-cut parts
- Automatic and manual application possible

AREAS OF APPLICATION

SikaDamp®-641 is applied at any area during standard automotive assembly process. It is compatible with automotive treatment baths and finishing processes.

It shall be applied on metal, aluminum or composite substrates. It is suitable for pure or electro coated surfaces in the body or paintshop as well as on painted surfaces in trim shop. SikaDamp®-641 can be applied on flat, slightly curved surfaces and also in vertical and inverted areas.

This product is suitable for experienced professional users only. Tests with actual substrates and conditions have to be performed ensuring adhesion and material compatibility.

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ADHESION AND DURABILITY

SikaDamp®-641 has demonstrated superior adhesion to cold rolled and galvanized steel as well as electro coated surfaces, base-coat and clear coat body panels. SikaDamp®-641 maintains its acoustic and adhesive properties after subjection to the various bake schedules and accelerated aging and weathering test conditions used in the automotive industry.

METHOD OF APPLICATION

Surface preparation

The surfaces must be clean, dry and free from grease, oil, water and dust.

Application

Ensure proper and full surface adhesion over the entire geometry of the part.

The parts have to be pressed on the substrate over the entire surface to ensure adequate contact pressure using a pressure roller consisting of soft foam rubber. The shape and width of the pressure roller shall be adjusted to the geometry of the part and the surface to achieve best adhesion.

If cold applied the application pressure is crucial and directly linked to the adhesion properties.

Application may only be processed on material and substrate temperatures between 20 °C and 35 °C. Ideal application temperature is between 25 °C and 30 °C.

STORAGE CONDITIONS

Material shall be kept dry at temperatures below 35 °C and at a relative humidity of maximum 50 %. Storage outside of these conditions can influence adhesion properties and therefore reduce the shelf life. If these conditions cannot be met a regular check of the parts must be carried out.

The parts can be transported at lower temperatures as stated for application. Prior the application they have to meet the stated application temperature.

FURTHER INFORMATION

The information herein is offered for general guidance only. Advice on specific applications is available on request from the Technical Department of Sika Industry.

Copies of the following publications are available on request:

- Voluntary Safety Information Sheet
- Application Manual for SikaDamp® application

PACKAGING INFORMATION

SikaDamp®-641 is available as cut to shape by die-cut. Various layer thicknesses between 1.3 mm and 4.0 mm are available. Further thicknesses on request.

BASIS OF PRODUCT DATA

All technical data stated in this document are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

HEALTH AND SAFETY INFORMATION

This product contains no substances which are intended to be released from the article under normal or reasonably foreseeable conditions of use. A safety data sheet is therefore not needed to bring the product to the market, to transport or to use it. For safe use follow the instructions given in the Voluntary Safety Information Sheet.

DISCLAIMER

The information, and, in particular, the recommendations relating to the application and enduse of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.