

PRODUCT DATA SHEET

SikaBaffle®-455 LB

Thermally expandable cavity sealer for low bake automotive applications

TYPICAL PRODUCT DATA

Chemical base	EVA
Color (CQP001-1)	Pink
Density	1.06 kg/l
Volumetric expansion	1 600 % ^A
Standard Baking Conditions	20 minutes 140 °C / 284 °F ^B
Shelf life	6 months ^C

CQP = Corporate Quality Procedure

^{A)} Depending on geometry / cure condition^{B)} Object temperature^{C)} Storage at 25 °C / 50 % R.H.

DESCRIPTION

SikaBaffle®-455 LB is a thermoplastic, heat-reactive baffle with very high expansion and good sealing properties. Used as an acoustic cavity sealer in automotive body shop applications, this product also provides effective barrier properties against air, moisture and dust intrusion. Because of low water absorption SikaBaffle®-455 LB can be used in below the belt line applications where there is likely exposure to water. It can be processed as injection molded parts to seal complex cavity shapes; alternatively, simple designed extruded parts can be applied with low or no associated tooling costs. SikaBaffle®-455 LB exhibits high expansion over a broad temperature range and it is developed for low temperature baking conditions.

PRODUCT BENEFITS

- Effective sealing preventing noise, air, dust and moisture entering the vehicle
- High and uniform expansion also at low bake temperature
- Ideal for cold zones, i.e. heat shielded areas
- Resistant to multi-bake curing conditions
- Applicable for both acoustics and water sealing applications
- Full range of design options through injection molding or extrusion to seal any type of body cavities

AREAS OF APPLICATION

SikaBaffle®-455 LB shall be applied in the automotive body shop and is compatible with common body and paint shop treatments. Designs can be fitted to existing sheet metal holes using standard or customized mechanical fasteners. The mechanical fasteners are chosen or designed to maintain the proper positioning throughout the assembly process without deflection or movement. Due to a high flexibility of profile options of extruded and molded parts, SikaBaffle®-455 LB can be utilized in nearly every type of cavity. This product is suitable for experienced professional users only.

ADHESION AND DURABILITY

After exposure to standard electrodeposition bake conditions, SikaBaffle®-455 LB exhibits good adhesion to e-coated surfaces. This product maintains its sealing and adhesive properties after subjection to the various bake schedules used in the automotive industry and under real aging conditions in the vehicle. SikaBaffle®-455 LB is chemically resistant to water, salt and lubricating oils typically applied in automotive manufacturing.

Test with actual substrates and conditions have to be performed to ensure adhesion and material compatibility.

DESIGN

By engineering sealer/carrier design, the acoustic properties of the system can be tailored to meet the requirements. Dedicated team of design and CAD/CAM engineers can develop optimized part designs from math data, blueprints, actual or mock-up cavities during any phase of vehicle development. Rapid prototyping of parts can be used to meet demanding development time schedules.

STORAGE CONDITIONS

Material has to be kept dry at temperatures between 15 °C and 25 °C and at a relative humidity of maximum 50 %. Do not expose to sunlight. Storage outside of standard conditions can affect the shelf life.

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 Automotive.

Copies of the following publications are available on request:

- Voluntary Safety Information Sheet

PACKAGING INFORMATION

Recyclable corrugate or returnable containers

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet 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 end-use 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 can always refer to the most recent version of the local Product Data Sheet for the relevant product, available on our website. The information in any downloaded version is valid as of the time of download.

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