



Product Verification

Sustainability

according to BNB BN 2015

according to BREEAM International New Construction 2016

according to DGNB NBV 2015

according to DGNB Gebäude Neubau 2018

according to LEED Building Design and Construction V3 (2009)

according to LEED Building Design and Construction V4 (2015)

Microlen is a very high quality raw material of polyethylene foam. Microlen is crosslinked and produced under pressure at high temperatures. This creates a very fine, even cell structure. Microlen is very elastic, water repellent and can be used in many areas due to varying density, e.g. as profile fillers for thermal decoupling between wall and roof. We can provide special form parts for your application.

Microlen PE 30 may be used in combination with DC 993 from Dow Corning for Structural Glazing constructions.

It can be made self adhesive on one side, and therefore be used as sealing material or as a spacing block, for example.

Due to our versatile possibilities of processing, we are able to apply Microlen in any form desired. The product can be covered and coated thanks to its special properties.

Technical data:

	Microlen PE 10	Microlen PE 15	Microlen PE 30	
Colours	white*	white*	anthracite / white	
Density	100 ± 15 kg / m ³	60 ± 8 kg / m ³	32 ± 5 kg / m ³	ac. to ISO 845
Elongation at break	169%	144 %	113 %	ac. to ISO 1926
Tensile strength	803 kPa	435 kPa	171 kPa	ac. to ISO 1926
Compression strength	10 % deformation	205 kPa	110 kPa	37 kPa 50 kPa 100 kPa ac. to ISO 844
	25 % deformation	240 kPa	130 kPa	
	50 % deformation	361 kPa	210 kPa	
Compression return	after ½ h recovery	6 %	8 %	11 % ac. to ISO 1856-B
	after 24 h recovery	2 %	3 %	
Shore hardness 00	76	65	47	internal
Water absorption after 28 days	1 Vol.-%	1 Vol.-%	1 Vol.-%	DIN 53428
Max. Temperature stability	+ 105 °C	+ 100 °C	+ 100 °C	internal
Temperature range of use	- 40 °C to + 80 °C	- 40 °C to + 80 °C	- 40 °C to + 80 °C	standard data PE
Thermal conductivity	at 10 °C	λ = 0.045 W / m·K	λ = 0.040 W / m·K	λ = 0.036 W / m·K ISO 2581
	at 40 °C	λ = 0.048 W / m·K	λ = 0.043 W / m·K	
Flammability	≤ 100 mm / min	≤ 100 mm / min	≤ 100 mm / min	ISO 3795
Building classification			B 2	DIN 4102

* Colour anthracite is also possible on request.

Microlen PE 30 and Microlen PE 15, on one side self adhesive, correspond to building Material Class B2 according to DIN 4102.

Microlen PE 30, not self adhesive and self adhesive on one side, is tested according to ETAG Nr. 002: 1998-07 – Guideline for European Technical Approval for Structural Sealant Glazing Systems – and fulfils the requirements for compatibility with the sealant / adhesive DC 993 from Dow Corning. Microlen therefore is in combination with DC 993 from Dow Corning usable for Structural Glazing Systems (test report 507 30184 of ift Rosenheim).

When constructions are transparent, please observe that Microlen is shrinking during time due to temperature and UV effects.

Attention! Important Note:

Above information are based on best present knowledge of current technology, but do not guarantee faultless processing of our products. The information is based on practical results of our tests, but is not binding and does not constitute warranties of characteristics in terms of Federal Supreme Court jurisdiction. Our information does not constitute a legally binding assurance of certain properties or suitability for a specific purpose. Supplementary information by our specialists are merely recommendations, for which no liability is accepted.

Due to the many possible applications of our products, we recommend subjecting the project to a thorough suitability test on original materials before release for further application.

Since our information are non-binding we do not warranty their correctness. For this reason we accept no liability for possible improper processing based on information submitted by our employees.

This Technical data sheet replaces all previous versions and is valid until a new version is issued, or until Dec. 31, 2024. Please request the latest version after Jan. 01, 2025.

Dr. Hermann, Anwendungstechnik / Application Technology, Gingen / Fils

BOSIG GmbH

D – 73333 Gingen, Brunnenstraße 75 - 77

Telephone +49(0)7162-40 99-0 Fax +49(0)7162-40 99-200

www.bosig.de
info@bosig.de