ELASTOSIL® SC 870 A/B

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Room Temperature Curing Silicone Rubber (RTV-2)

ELASTOSIL® SC 870 A/B is a thixotropic, addition-curing, two-part silicone rubber, forming a mainly closed cell foam. ELASTOSIL® SC 870 A/B is perfectly suited for processing with automatic dispensing equipment. It is suitable for CIPG foam gaskets even in 3D geometries due to its outstanding rheology.

Properties

- good processability on automated dispensing equipment
- easy control of mixing quality due to different colors of the components
- no ozone damaging blowing agents
- no release of toxic or strong smelling substances during foaming or curing
- low heat of reaction (max. 40 °C)
- low toxicity of thermal decomposition products
- long-term flexible over a temperature range of -50 °C to +180 °C
- good chemical resistance
- fast foaming and cure
- medium foam density

Special features

- Compressible
- Foam
- Heat resistant
- Low compression set
- Non-sag
- Thixotropic
- Two-component

Technical data

Properties Uncured

Property	Condition	A	B	Method
Viscosity, dynamic	23 °C	50000 mPa·s	50000 mPa·s	Brookfield
Density	23 °C	1.05 g/cm^3	1.05 g/cm^3	ISO 2811
Color	-	black	colorless	-

These figures are only intended as a guide and should not be used in preparing specifications.

Properties Catalyzed A+B

Property	Condition	Value	Method
Tack-free time	-	10 - 15 min	-
Pot life[1]	-	150 s	-
Mix ratio[2]	-	1 : 1	A : B

[1](Viscosity dynamic, D = 1 1/s, 25 °C time to 200 Pas)

[2](pbw)

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Properties Cured

24 h storage at 23 °C / 50 % RH.

Property	Condition	Value	Method
Elongation at break	-	100 %	ISO 1798
Tensile strength	-	350 kPa	ISO 1798
Hardness Shore 00 (with skin)	-	40 - 60	ISO 868
Hardness Shore A[1]	-	8 - 12	ISO 868
Density	23 °C	0.35 - 0.4 g/cm^3	ISO 2781
Color	-	gray	-

[1](with skin)

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Applications

- Luminaires
- Cured-In-Place-Gaskets (Dry Type)
- Seals & Gaskets

Application details

- general purpose foam for gaskets (dispensed foam gaskets)
- especially suitable for 3-dimensional gasket bead
- general purpose high and low temperature resistant sealing material
- suitable for NVH insulation

Processing

ELASTOSIL® SC 870 A/B shows primerless adhesion to many substrates (metals, glass, ceramics, PA, PBTP). If self-adhesion is not sufficient, surface treatment or a primer may be applied.

For processing we recommend to use automatic mixing and dispensing equipment with dynamic mixer, our technical service will give advice for proper selection.
The quality of the foam is highly influenced by processing parameters (e. g. addition of air, type of mixer) and environmental parameters. As ELASTOSIL® SC 870 A/B is an addition-curing system certain substances can inhibit the foaming and curing process. Our technical service will be glad to help to solve such problems.

We recommend to run preliminary tests to optimize conditions for the particular application.

Attention:
During foaming and curing hydrogen gas is evolved. Please ensure proper ventilation, if larger amounts of material are processed. Release of hydrogen is almost completed after 24 hours.

The platinum catalyst is contained in component A.

Caution:
Only components A and B that have the same lot number may be processed together!

Packaging and storage

Storage

The 'Best use before end' date of each batch is shown on the product label.

Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

Safety notes

According to the latest findings, the addition-curing silicone rubber ELASTOSIL® SC 870 A/B contains neither toxic or corrosive substances which would require special handling precautions.

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER subsidiaries or may be printed via WACKER web site http://www.wacker.com.

QR Code ELASTOSIL® SC 870 A/B

For technical, quality or product safety questions, please contact:

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