ELASTOSIL® Film 2030 250/150

Product description

ELASTOSIL® Film 2030 250/xxx is a high-precision silicone film from cross-linked silicone rubber. The film shows a maximum thickness variation across the total width less than ±5%. The precision allows a constant electrical resistance and good comparative tracking resistance across a broad range of temperatures.
The width is 250 mm and thickness is given in µm (xxx).

Properties

ELASTOSIL® Film has got the outstanding mechanical and physical properties of platinum cured silicone.

- high and selectively gas and water vapor permeable
- high temperature resistant and low temperature flexible
- high dielectric strength combined with a high specific resistivity
- optical transparent
- constant mechanical and electrical properties over a wide range of temperatures and operating time
- solvent free

Application

- dielectric film in EAP applications for sensors, actuators and generators
- functional membranes
- optical layers/interlayers
- protective films
- functional packaging

Processing

ELASTOSIL® Film can be processed by conventional technologies like die cutting, laser cutting or water jet cutting. It can be glued on a numerous of substrates with standard silicone adhesives.
Silicone based conductive material is available.

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Storage

Minimum temperature allowed during storage and transportation:
0 °C
Maximum temperature allowed during storage and transportation:
40 °C

Packaging

ELASTOSIL® Film is available in a variety of thicknesses. Our standard portfolio offers film layers from 20 µm to 400 µm. Further thicknesses can be supplied upon request.

The delivery takes place in rolls and sheets. Any form is delivered on a PET carrier.

Dimensions of film roll stock:
10 m² ≙ 40 running meter x 250 mm
20 m² ≙ 80 running meter x 250 mm

Roll stock has an inner diameter of 3``(≙ 7,62 cm)

Film sheets have the dimension 210 mm x 250 mm; delivery in cartons with 20 sheets each.

Additional information

ELASTOSIL® Film is manufactured and packed under cleanroom conditions, class 8. Cutting and packing of film sheets are done in a clean environment but outside the cleanroom.

Safety notes

Not applicable; product is already fully cured.

Product data

Typical general characteristics	Inspection Method	Value
Hardness Shore A	DIN ISO 7619-1	27
Tensile strength	DIN 53504 S 1	6,0 N/mm^2
Tear strength	ASTM D 624 B	10 N/mm
Elongation at break	DIN EN ISO 527-3	450 %
Glass transition temperature		- 126 °C
Operating range		- 45 °C to 200 °C
Gas permeability (selectively)	DIN 53536	CO_2/N_2 10:1
Water vapor permeability	JIS 1099 A 1	3000 g/m²/24h at 20 µm
Water vapor permeability	JIS 1099 A 1	1200 g/m²/24h at 50 µm
Water vapor permeability	JIS 1099 A 1	800 g/m²/24h at 100 µm
Compression set (22h, 100 °C)	DIN ISO 815-B	5 %
Permittivity ε		2,8
Dielectric strength	VDE 0303	80 - 100 V/µm
Volume resistivity	DIN IEC 60093	10^{14} Ω cm

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

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

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