

Silicone Potting Compound 011

An innovative cross-linking material for condensation systems. Our Silicone Potting Compound 011 possesses exceptional physicochemical properties, including high dielectric strength and significant transverse specific resistance. It stands out due to its two-component application: a transparent liquid combines with a hardener, resulting in a clear, solid rubber. This rubber encapsulates electronic components, reaching every crevice and forms a strong, stable coating — an ideal shield against moisture, dust and fluctuating temperatures. Silicone Potting Compound 011 is also effective in hermetically sealing systems and protecting power conductors.

Product features:

- ✓ protects against moisture, dust and external factors,
- ✓ excellent fluid consistency before cross-linking,
- ✓ dry to the touch after curing,
- ✓ does not detach from surfaces after cyclic heating,
- ✓ easy application and even distribution,
- ✓ safe formula for delicate electronic surfaces.

Applications:

- ✓ telecommunications,
- ✓ traffic control,
- ✓ automotive electronics,
- ✓ electronic and electrical systems,
- ✓ computers and peripherals,
- ✓ power supplies, energy converters and power semiconductors.



Physicochemical properties (A & B)

Appearance	Transparent liquid
Density at 25°C	~0.97 g/cm ³ (A) ~0.94 g/cm ³ (B)
Viscosity at 25°C	2000±500 cP (A) ~0.53 cP (B)
pH	6-8 (A)
Shelf life	12 months

Mixing ratio: 100:8 (A+B)

Density at 25°C	~0.97 g/cm ³
pH of aqueous extract	7±1
Volatile content	3%
Pot life at 25°C	~30 minutes
Gelation time at 25°C	Max. 48 hours

Properties after 100 hours of seasoning

Consistency	Transparent soft silicone rubber
Operating temperature	-50°C to 200°C
Hardness (Shore A scale)	25 [A]
Transverse specific resistance at 20±5°C and 65±5% humidity (ASTM D257)	1*10 ¹² Ω x cm
Surface specific resistance at 20±5°C and 65±5% humidity (ASTM D257)	1*10 ¹³ Ω
Dielectric strength at 20±5°C and 65±5% humidity (PN-EN 60243-1)	10.0 kV/mm
Dielectric loss factor tg δ (ASTM D150)	0.005 (10 ⁶ Hz)
Relative dielectric permittivity ε _r (ASTM D150)	3 (10 ⁶ Hz)
Tracking resistance (PN-EN 60112:2003)	600 CTI [V]

Compatibility:

Silicone Potting Compound 011 is chemically neutral and compatible with most materials used in electronics, including metals, plastics and glass. It maintains its properties across a wide range of environmental and thermal conditions.

Application method	
Without degassing	Yes
With degassing in a vacuum chamber	Yes

Usage instructions:

Restricted to professional users. Read safety data sheet carefully prior to use.

Before application, ensure that the system is clean, degreased and dry to maximize the effectiveness of the potting compound. Combine both components (base material A and catalyst B) in a ratio of **100:8** and mix thoroughly by hand or mechanically until a uniform mass is achieved. The components are pre-measured in the sets for easy mixing: 100 g (100 g A + 8 g B) and 1 kg (1 kg A + 80 g B).

For best results, place the prepared mixture in a vacuum chamber (30–60 mm Hg) for approximately 5 minutes to remove air bubbles. During this process, the mass will initially expand about five times its original volume before returning to its initial state. After the degassing process, wait an additional two minutes before proceeding with the application.

Pour the prepared mixture evenly over the system, ensuring that all components are thoroughly covered. Leave the potted system open for preliminary curing at room temperature for about 24 hours to allow the compound to solidify. Ensure proper air circulation to facilitate the release of ethyl alcohol emitted during cross-linking.

Full curing takes approximately 100 hours, during which the potting compound reaches its final properties, including maximum mechanical and thermal resistance. Once the process is complete, the potting compound forms a transparent, solid rubber that effectively protects the system from external factors.

If a vacuum chamber is unavailable, the mixture can be applied without the degassing process. The final result in this case depends on the care taken during application.

Package

Metal container	100 g (ART.AGT-219) - 4 pcs.* 1 kg (ART.AGT-260) - 1 pc.*
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*Quantity of pcs. in a bulk package.

Storage:

Store in original packaging in dry warehouses at a temperature not exceeding 30°C.

Technical support:

AG TermoPasty provides technical support, answering questions about the technical specifications and applications of our products. Please contact us via email at info@termopasty.pl.

Note:

The data presented in this document reflects our current level of knowledge and describes the typical properties and applications of the product. However, the responsibility for determining its suitability for specific applications lies with the user. AG TermoPasty is not liable for the results of product use, as the conditions of application fall beyond our control.

