

## TECHNICAL DATA SHEET

# Silicone Potting Compound 037

A two-component, addition-curing material designed specifically for protecting electronic systems, particularly LED modules. After curing, it forms a transparent coating with a rubber-like consistency. The potting compound provides exceptional protection against environmental factors, vibrations, and moisture while maintaining excellent optical properties.

#### **Product features:**

- crystal-clear transparency,
- rubber-like consistency after curing,
- UV radiation resistance,
- easy application and uniform spreading over the surface,
- safe formula for delicate electronic surface.

### Applications:

- LED modules,
- telecommunications,
- motion control,
- automotive electronics,
- electronic and electrical systems,
- power supplies, energy converters, and power semiconductors.

Physicochemical properties (A & B)		
Appearance	Transparent liquid	
Density at 25°C	~0.98 g/cm <sup>3</sup>	
Viscosity at 25°C	2500±500 cP	
Shelf life	12 months	
Properties of the Mixture 3:2 (A+B)		
Density at 25°C	2500±500 cP	
Working time at 25°C	~60 minutes	
Curing time at 25°C	Max. 24h	
Properties of the Mixture After 48h Curing		
Consistency	Transparent solid rubber	
Operating temperature range	-50°C to 180°C	
Shore A hardness	12 [A]	
Volume resistivity at 20±5°C and 65±5% RH (ASTM D257)	1.8*10 <sup>12</sup> p <sub>ν</sub> Ω x m 1.8*10 <sup>14</sup> Ω x cm	
Surface resistivity at 20±5°C and 65±5% RH (ASTM D257)	$4.8*10^{14} \mathrm{p_s}\Omega \mathrm{x}\mathrm{m}$	
Dielectric loss factor tg δ (ASTM D150)	0.023 (120 Hz) 0.013 (1 kHz) 0.002 (10 kHz) <0.001 (100 kHz)	
Relative dielectric permeability ε <sub>,</sub> (ASTM D150)	3.19 (120 Hz) 3.13 (1 kHz) 3.10 (10 kHz) 3.09 (100 kHz)	
Dielectric strength (PN-EN 60243-1)	11.0 kV/mm	
Tracking resistance (PN-EN 60112:2003)	600 CTI [V]	



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#### Compatibility:

Silicone potting compound 037 is chemically neutral and compatible with most materials used in electronics. Its elastic coating does not cause mechanical or chemical damage, ensuring safe protection of delicate components.

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

#### **Usage instructions:**

### Restricted to professional users. Read SDS carefully prior to use.

Before application, ensure that the system is clean, degreased, and dry to achieve maximum adhesion and potting effectiveness. The content of both components (Part A and Part B) should be mixed in a **3:2** ratio and thoroughly blended manually or mechanically for about 2 minutes until a homogeneous mass is obtained. The components are pre-packaged in appropriate proportions (60 g A + 40 g B and 600 g A + 400 g B) for easy and precise mixing.

For best results, it is recommended to place the prepared mixture in a vacuum chamber (30-60 mmHg vacuum) to remove trapped air. During this process, the mixture first increases in volume by about 50% and then returns to its original size. This step should take approximately 3 minutes to effectively remove any additional air bubbles.

The prepared mixture should be evenly poured over the component so that all elements are thoroughly covered. The poured material should then be left to cure at room temperature. The initial curing process can take up to 24 hours. After the curing process, the potting compound forms a transparent rubber-like gel, providing insulation and protection for electronic components.

If a vacuum chamber is not available, the mixture can also be used without the degassing process. However, the final result will depend on the care taken during application.

	Package	
х	100 g (ART.AGT-315) - 4 pcs.* 1 kg (ART.AGT-316) - 1 pc.*	

\*Quantity of pcs. in a bulk package

#### Storage:

Metal B

Store in originally sealed containers at a temperature between 5 and  $25^{\circ}$ 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 reflect our current state of knowledge and describe the typical properties and applications of the product. However, the responsibility for determining the suitability of this product for specific applications lies with the user. AG TermoPasty is not liable for the results of the product's use, as the conditions of its application are beyond our control.

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