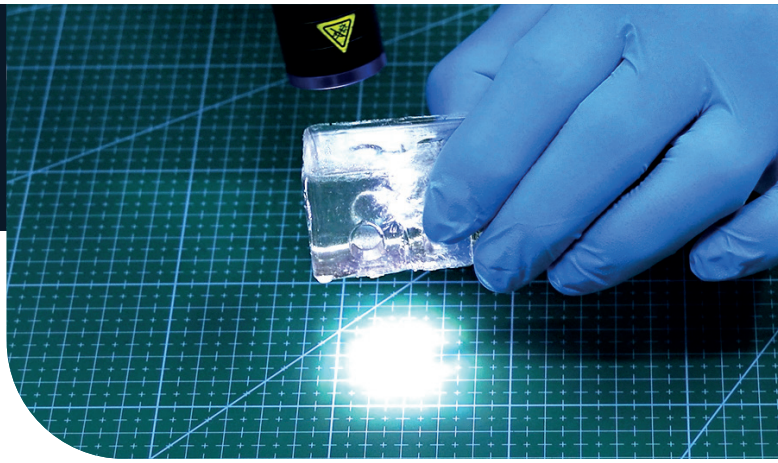
TermoPasty®

TECHNICAL DATA SHEET

Silicone Potting Compound 037



Modern two-component encapsulant for LED modules and electronic systems. Silicone Potting Compound 037 cures into a transparent, flexible rubber-like coating, providing reliable protection against moisture, vibrations, dust and extreme temperatures. This addition-curing material is chemically neutral and safe for delicate electronics — it does not yellow, crack or cause corrosion. The crystal-clear layer allows light to pass through without distortion, making it ideal for optical applications. Silicone Potting Compound 037 offers long-lasting durability and performance — a guarantee of reliable protection and stability.

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^3
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^{12} p_v Ω x m 1.8*10^{14} Ω x cm
Surface resistivity at 20±5°C and 65±5% RH (ASTM D257)	4.8*10^{14} p_s Ω x 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_r (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 safety data sheet 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	
Metal can	100 g (ART.AGT-315) - 4 pcs.* 1 kg (ART.AGT-316) - 1 pc.*

*Quantity of pcs. in a bulk package

Storage:

Store in originally sealed containers at a temperature between 5 and 25°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.