Technical Data Sheet Rev Date: 19.01.2024



# **EUROBOND Elecolit 342**

# **Product Description**

Elecolit adhesives are single or two-component adhesives. They are mostly based on epoxy resin and can be cured at room temperature or by exposure of heat. Elecolit adhesives are electrically and / or thermally conductive adhesives which are designed for potting, bonding or contacting of conductors.

Elecolit 342 is a one component silver- filled electrical conductive coating agent with good glass, metal and plastic adhesion. Elecolit 342 can be used with brush, dispenser or needle transfer. Elecolit 342 is solvent-based. Elecolit 342 distinguishes a good glass adhesion. After long-term storage, Elecolit 342 must be homogenized because the silver naturally sediments in the low-viscosity resin.

### **Curing Properties**

The product is a one-component adhesive and cures under exposure to heat. Possible curing temperatures are listed in the table below.

### Thermal curing

Time at 25°C	12 h
Time at 50°C	2 h
Time at 100°C	30 min
Time at 120°C	10 min

The curing times given are guidelines. They refer to the curing of 2 g of adhesive. The heating up of the joining members are not taken into account.

The final strength of the adhesive is reached at the earliest after 24 h.

## **Technical Data**

Resin	acrylate
Appearance	grey
Filler	silver
Filler – weight [%]	75
Particle size D95 [µm]	10

#### **Uncured material**

Viscosity [mPas]	1 000 - 2 000
(Brookfield LVT, 25°C, Sp 3, 30rpm)	
PE-Norm 001	
Density [g/cm³]	2,3
PE-Norm 004	
	>44
Flash point [°C]	
PE-Norm 050	

# **Cured material**

#### **Contact Details**

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Hardness shore D	75
PE-Norm 006 Temperature resistance [°C]	-40 - 150
Water absorption [mass %]	<1
PE-Norm 016	

Coefficient of thermal expansion [ppm/K] below Tg	77
PE-Norm 017	

Thermal conductivity [W/m*K]	2
PE-Norm 062	
Volume resistivity [Ohm*cm]	1,E-03
PE-Norm 040	

### Transport/Storage/Shelf Life

Trading unit	Transport	Storage	Shelf-life*
Cartridge	at room temperature	0°C - 10°C	at delivery
Other packages	max. 25°C		6 months

<sup>\*</sup>Store in original, unopened containers!

# Instructions for Use Surface preparation

The surfaces to be bonded should be free of dust, oil, grease or other dirt in order to obtain an optimal and reproducible bond.

For cleaning we recommend the cleaner IPA. Substrates with low surface energy (e.g. polyethylene, polypropylene) must be pretreated in order to achieve sufficient adhesion.

#### **Application**

Our products are supplied ready to use. Depending on packaging they can be applied by hand directly from the container or semi or fully automatically. With automated application from the cartridge the adhesive is conveyed by a compressed air-operated displacement plunger via a valve in the needle.

When metering low viscosity materials from bottles the adhesive is transported by a diaphragm valve. If help is required, please contact our technical department.

Adhesive and substrate should not be cold and must be warmed up to room temperature prior to processing.

For safety information refer to our safety data sheet.

# **DISCLAIMER**

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy themselves as to the suitability of such information for their particular use.

#### **Contact Details**

TECHSiL Limited