

DESCRIPTION

The PERMACOL 2812 A/B is a 2-component silver filled electrical conductive adhesive on epoxy basis. This adhesive cures at roomtemperature, however for most applications it is cured at elevated temperatures to reach a lower volume resistance. The adhesive bonds good to different materials. After curing the adhesive is stable and obtains good resistance to moisture and heat. This product is flexible, which makes it ideal for foil applications.

Technical details	
Chemistry	Epoxy
Colour	Silver
Viscosity mixture	20.000 mPa.s (D=30/s 23°C)
Mixing ratio	100 : 100 by weight
Particle size	<50 µm
Pot life	1-2 hrs at 20°C
Curing time	30 min at 100°C
	60 min at 80°C
	8 hrs at 70°C
	14 hrs at 50°C
	48 hrs at 20°C
Hardness	70 shore D
Density	3,8 g/ml
Volume resistance	< 5×10 ⁻³ Ω.cm (cured at 100°C)
Thermal conductivity	4,3 W/m.K
Glass transition (Tg)	71°C
CTE below Tg	104 ppm/°C
CTE above Tg	170 ppm/°C
Temperature resistance	-40°C to 120°C
Temperature resistance (after curing 30 minutes at 100°C)	-40°C to 160°C
Shear strength	
Steel	17,8 N/mm ²
Aluminium	13,6 N/mm ²

BENEFITS

- High conductive properties
- For dispensing and screen printing
- Moisture resistant
- Flexible
- RoHS und REACH compatible

USAGE INSTRUCTIONS

Make sure the substrates are clean and free from dust, water, grease, fingerprints, oil, etc. Depending on the storage, both components can sag. Before using the product, the components need to be stirred separately.

Weigh the components according to the mixing ratio and mix until a homogeneous colour is reached or use a double syringe and mix the components until a homogeneous colour is reached. Curing at temperatures below 70°C will result in a higher volume resistivity. To obtain better electric conductivity, it might be beneficial to cure at an elevated temperature after room temperature curing.

CLEANING

Uncured adhesive can be removed and cleaned by means of solvents as Ethanol, Acetone, Isopropanol (IPA) or MEK. Cured adhesives must be removed mechanically.

STORAGE

Store in its original packaging frost free and dry. See packaging for the expiration date. Shelf life: 12 months. Cartridges have a shelf life of 6 months at -18°C.

SAFETY

Use protective gloves to avoid direct contact with the skin. Check the Material Safety Data Sheet for specific safety information.

PACKAGING

The PERMACOL 2812 A/B is available in different kinds of cartridges and jars.

Legal Disclaimer

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