

Description

EW 6680 is a transparent two-part epoxy adhesive with fast curing speed and good environmental resistance. It is designed for component potting and structural bonding. Typical application is component potting in chargers.

Features

- Recommended substrates: plastic, metal, ceramic
- Good flowability
- Fast curing speed

Uncured Properties

Chemical Type	Epoxy
Appearance	
Part A	Transparent
Part B	Transparent
Viscosity @ 25°C [mPa.s]	
Brookfield DV2T, spindle 14# @ 10rpm	
Part A	11,000
Part B	13,000
Mixed	13,000
Mix Ratio A:B	
By Volume	1:1
Specific Gravity [g/cm³]	
Part A	1.16
Part B	1.15
Shelf Life @ 10-28°C [months]	6

Curing Conditions

Setting Time [mins]	3
@ 25°C (30g adhesive mixed)	
Full Strength @ 25°C [hrs]	24

Cured Properties

Hardness [Shore D]	75
ASTM D2240	

Shear Strength [MPa]	
Al/Al	>7
ASTM D1002	
Glass Transition Temperature (Tg) [°C]	56
ISO 11359	
Coefficient of Thermal Expansion [ppm/K]	
Below Tg	72
Above Tg	218
ASTM D696	
Tensile Strength [MPa]	16
ASTM D638	
Elongation at Break [%]	5
ASTM D638	
Surface Resistivity [ohm-cm]	>1.0x10 ¹⁴
ASTM D257	
Volume Resistivity [ohm-cm]	>1.0x10 ¹⁵
ASTM D257	
Dielectric Strength [kV/mm]	20
ASTM D149	

Directions for Use

1. Surface Treatment

Surfaces to be bonded should be free of dust, oil, grease or any other contaminants in order to achieve a reproducible bond. For slightly contaminated surfaces, it is sufficient to wipe with isopropanol or ethanol. Substrates with a low surface energy (e.g. polyethylene, polypropylene, Teflon) need to be pre-treated physically (e.g. atmospheric plasma or corona) in order to achieve sufficient adhesion.

2. Application

Products are supplied ready for use. Depending on package type, they can be dosed manually, semi-automatically or fully-automatically with a dosage apparatus. With automatic dispensing using a cartridge,

the adhesive is conveyed via pressure and a piston rod to a dispense valve. With bottles, the adhesive is conveyed using a pump.

After application, it is recommended that the two substrates be adjoined immediately as it is possible the curing process will begin with select products under ambient conditions.

3. Suggested working temperature range is -40 to 135°C.

Storage

Maximum shelf life may be obtained when product is stored in a cool, dry location at a temperature between **10°C to 28°C**.

TO PREVENT CONTAMINATION OF UNUSED PRODUCT, DO NOT RETURN ANY PRODUCT TO ITS ORIGINAL CONTAINER.

Materials Handling

Refer to the Material Safety Data Sheet (MSDS) for this product.

Disclaimer

The information provided here including the recommendations for use and application of the product is based on internal laboratory test conditions and should only be used as a reference. CollTech does not assume responsibility for the test or performance results obtained by the user. It is the responsibility of the user to perform their own evaluations to confirm whether this product is suitable for their application.