



Polytec EP 630

Polytec EP 630 is a 100% solid, two component, low viscosity, high temperature adhesive, underfill and encapsulation.

It complies to USP Class VI Biocompatibility Standards

Typical Properties

Number of Components	2
Mix Ratio By Weight	
Part ,A' (resin)	100
Part ,B' (hardener)	10
Pot Life at room temperature	24 Hours
Shelf Life at room temperature	12 Months
Viscosity (84 RPM @ 23°C)	3000 mPa s
Consistency	Pourable Liquid
Specific Gravity Part ,A' (resin)	1,15 g/cm ³
Specific Gravity Part ,B' (hardener)	1,05 g/cm ³
Specific Gravity mixed	1,10 g/cm ³
Color (Before / Upon Cure)	Yellow / Amber

Polytec EP 630 provides excellent high temperature, chemical, electrical and moisture resistance.

It was designed for semiconductor, medical, hybrid, piezo, fiber optics, HV and UHV applications.

It has an excellent adhesion to silicon, glass, metal, ceramic, ferrite and most plastics and can be used as low viscosity adhesive, epoxy impregnation, underfill and encapsulation. Polytec EP 630 passed > 1000 autoclave steam cycles!

Typical applications:

- Near hermetic sensor and UHV seals
- Bonding and Sealing of fibers into ferrules
- Laminating PZT ferroelectrics
- Flip Chip Underfill
- Bonding fiber optic bundles (medical endoscopes)

Minimum Bond Line Cure Schedule

80°C	90 Minutes
120°C	30 Minutes
150°C	5 Minutes

Features:

- USP VI compliant
- Autoclavable (> 1000 autoclave steam cycles)
- Excellent moisture and chemical resistance
- Long pot life
- High Tg

Thermal Properties

Glass Transition Temperature	105°C
Continuous Operating Temperature	-55°C / 230°C
Intermittent Operating Temperature	-55°C / 300°C
Degradation Temperature	400°C

Processing:

- Dispensing
- Jet-Dispenser
- Potting

Mechanical Properties

Shore- Hardness	D85
Die Shear Strength	90 N/mm ²
CTE below Tg / Above Tg	40 / 170 [x10 ⁻⁶ /K]

Available Packs Sizes:

- See Price List
- Customized Packaging
- Also available as pre-mixed-frozen version

Cation-Anion Analysis

Chlorine (Cl ⁻)	<190 ppm
Sodium (Na ⁺)	< 3 ppm
Ammonium (NH ₄)	< 320 ppm
Potassium (K ⁺)	< 3 ppm
Fluoride (F ⁻)	< 3 ppm

Polytec EP 630-frozen

For more information, see:

- MSDS of Polytec EP 630
- Application notes

Please note:

The above listed information are typical data based on tests and are believed to be accurate. Polytec PT makes no warranties (expressed or implied) as to their accuracy. The above listed data do not constitute specifications. The processing (in particular the cure conditions) of the material, the process control and the variety of different applications at various customers are not under Polytec PT's control. Therefore Polytec PT will not be liable for concrete results in any specific application or in any connection with the use of this product.

In particular the cure conditions do have a major effect on the properties of the cured material. Therefore it is highly recommended to keep the cure schedule – once established - under tight control.

With the release of this data sheet all former data sheets will be null and void.

Polytec PT GmbH

Polymere Technologien • Polytec-Platz 1-7 • 76337 Waldbronn • Germany

Tel. ++49(0) 7243 604-4000 • FAX ++49 (0) 7243 604-4200 • Email: info@polytec-pt.de • <http://www.polytec-pt.de>