EPOXY TECHNOLOGY

DATA SHEET

EPO-TEK 301-2FL

Low Stress, Optical Epoxy

5/98

TYPICAL PROPERTIES

(To be used as a guideline only)

NUMBER OF COMPONENTS ..... Two

MIXING RATIO ..... PARTS BY WEIGHT
- Part "A" 100
- Part "B" (hardener) 35
- NOTE: If Part "A" crystallizes in storage, merely place container in a warm oven (without cap) until crystallization disappears. Allow to cool to room temperature before mixing with the Part "B" (hardener).

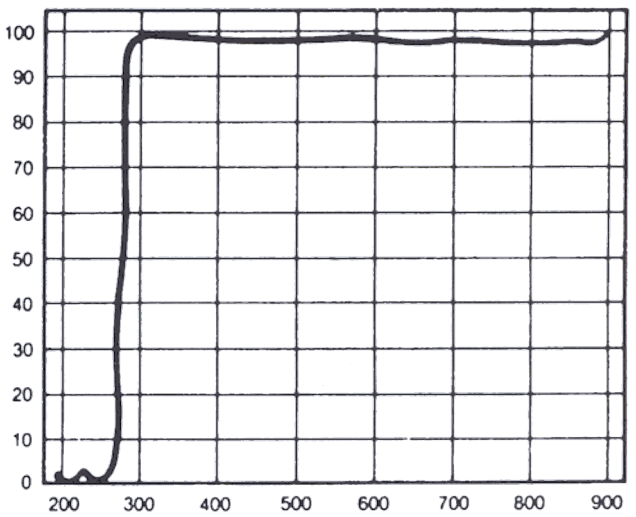
CURE SCHEDULE (minimum bond line temperature - use one of the following)
- 80°C ..... 1 hour
- Room Temperature ..... 3 days

PHYSICAL PROPERTIES
- Color (before and after cure) ..... clear
- Consistency ..... flowable liquid
- Specific Gravity 1.08
- Viscosity (@ 23°C/100 rpm) ..... 125 cPs
- Glass Transition Temp. (Tg)
  - cured @ 80°C/1 hour ..... 60°C
- Coefficient of Thermal Expansion
  - Below Tg ..... 55 x 10^{-6} in/in/°C
  - Above Tg ..... 203 x 10^{-6} in/in/°C
- Shore D Hardness 75
- Lap Shear Strength (Al to Al) ..... 2,600 psi
- Degradation Temperature ..... 328°C
- Outgas @ 300°C 1.18%
  - @ 200°C 0.85%
- Moisture Resistance (1 hr/100°C) ..... 1.58% gain
- Maximum operating temperature ..... 125°C

OPTICAL PROPERTIES
- Index of Refraction 1.5130
- Spectral Transmission
- 100% transmission ..... 300 - 900 nm

POT LIFE ..... 12 hours

SHELF LIFE
One (1) year when stored at room temperature. Keep container closed when not in use.
REFRIGERATION IS NOT REQUIRED



EPO-TEK 301-2FL

INSTRUMENT: PE320
SOURCE: W/Deut.
BANDPASS: Variable

REFERENCE: Quartz
SAMPLE: .0015" between two quartz plates

EPO-TEK 301-2FL is a two component, optical epoxy that can be cured at room temperature or with heat. The mixed epoxy provides a long (12 hour) pot life, low viscosity, excellent optical and handling characteristics.

Designed for fiber optic and optical applications where stress sensitive properties are paramount to the component or device being bonded, coated or potted. EPO-TEK 301-2FL is a compliant adhesive that will be resistant to impact or vibrations.

Recommended for lens bonding, potting optoelectronic displays, fiber-optic bundles (glass or plastic) as well as optical filters. It may also be used for impregnating wooden or porous objects for artifact restoration. Adhesion to glass, quartz, metals, wood and most plastics is very good.

EPOXY TECHNOLOGY, INC. 14 Fortune Drive Billerica, MA 01821-3972 USA

PHONE: 978.667.3805 1.800.227.2201 **FAX:** 978.663.9782