718 Park East Drive, Woonsocket, RI 02895, USA
Phone: (401) 726-4500
Email: info@epoxyset.com ■ Web: www.epoxyset.com

*ISO-9001-2015 Certified*

# TECHNICAL BULLETIN

## EPOXIBOND EB-220
## HIGH STRENGTH, FLEXIBLE EPOXY ADHESIVE

**EB-220** is a toughened, high strength, structural epoxy adhesive. This adhesive has an excellent combination of shear and peel strength. It has also excellent impact and vibration resistance and low temperature flexibility. This high performance epoxy adhesive exhibits very good physical, thermal, and electrical insulation properties. It is recommended for bonding engineering thermoplastics, SMC (sheet molding compounds) in aerospace and automotive applications. EB-220 is also recommended for bonding gold club heads.

### TYPICAL HANDLING PROPERTIES:

| | |
|---|---|
| Epoxibond | 220-A |
| Hardener | 220-B |
| Mix ratio by weight, (Resin/Hardener) | 100/50 |
| Mix viscosity (25°C), cps | 30,000-40,000 |
| Pot Life at 25°C (20 grams), minutes | 18-22 |
| Recommended Cure | 8-10hrs/25°C |
| Alternate Cure | 24-48 hr/25°C |

### TYPICAL CURED PROPERTIES AFTER RECOMMENDED CURE:

(Tested @ 25°C unless otherwise indicated)

| | |
|---|---|
| Color | Off-White |
| Specific Gravity | 1.14 |
| Hardness, Shore D | 77 |
| Lap Shear Strength to Aluminum, psi | 4500 |
| Lap Shear Strength to Aluminum after 7 days, psi | |
| Stainless Steel | 4000 |
| Copper | 4500 |
| Brass | 4100 |
| T-peel strength to aluminum (5-8mil bondline) | 50 |
| Service Temperature range, °C | -55 to 110 |
| Glass Transition Temperature, °C | 60 |
| Coefficient of Linear Thermal Expansion, $10^{-6}$/°C | |
| Below Tg | 77 |
| Above Tg | 195 |
| Dielectric Strength, Volts/mil | 900 |
| Dielectric Constant, 1 kHz | 4.28 |
| Dissipation Factor, 1 kHz | 0.4 |
| Volume Resistivity, ohm-cm | $2x10^{15}$ |

### INSTRUCTIONS FOR USE:

1. Mix at room temperature, 100 grams of Part-A with 50 grams of Part-B and vacuum degas.
2. Cure as recommended achieving the desired properties.
3. Typical cured properties were determined using recommended cure schedule. Some difference in properties may occur with the alternate or other cure schedules.

### FOR INDUSTRIAL USE ONLY:

These materials are intended for industrial use only, and the practices of good housekeeping, safety and cleanliness should be followed before, during and after use.

### PACKAGING OPTIONS:

Available in Pint, Quart, Gallon, and 5-gallon kits.

Also available in 50mL and 400mL dual cartridge systems.

### WARNING!

Although the system contains low volatility materials, care should be taken in handling. Adequate ventilation of work place and ovens is essential. These materials may cause injury to the skin following prolonged or repeated contact and dermatitis in susceptible individuals. In case of skin contact, wash thoroughly with soap and water. For eyes, flush immediately with plenty of water for at least 10 minutes and seek medical attention. Refer to Material Safety Data Sheet for additional health and safety information.

### SHELF LIFE:

The shelf life of these materials is greater than two years when stored in unopened containers at an average temperature of 25°C.

**DISCLAIMER:** All data given here is offered as a guide to the use of these materials and not as a guarantee of their performance. The user should evaluate their suitability for own purposes. Properties are typical and should not be used in preparing specifications. Statements are not to be construed as recommendations to infringe any patent.