



ISO-9001-2015 Certified

718 Park East Drive, Woonsocket, RI 02895, USA

Phone: (401) 726-4500

Email: info@epoxyset.com ■ Web: www.epoxysetinc.com

TECHNICAL BULLETIN

SetWORX™ 90

TOUGHENED, HIGH STRENGTH EPOXY ADHESIVE

SETWORX-90 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.

Applications: The high-performance epoxy provides excellent bond strengths to a wide variety of plastics and metals. Ideal for general purpose industrial applications requiring extended work life for adjusting parts during assembly.

- Features:**
- High shear strength • High peel strength • 90 minute work life
 - BPA Free • Non-hazardous shipping • Outstanding environmental performance • Easy mixing

TYPICAL HANDLING PROPERTIES:

Color	
Resin (PART-A)	White
Hardener (PART-B)	Amber
Viscosity (25°C), cps	20,000-30,000
Mix Ratio (Resin/Hardener)	
by weight	2:1
by volume	2:1
Pot Life at 25°C (20 grams), minutes	90-100
Recommended Cure	24hrs/25°C
Alternate Cure	1 hr/65°C

TYPICAL CURED PROPERTIES:

Color	Off White
Specific Gravity	1.1
Hardness, Shore D	78
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 120
Glass Transition Temperature, °C	70
Coefficient of Linear Thermal Expansion, 10 ⁻⁶ /°C	
Below Tg	77
Above Tg	195
Dielectric Strength, Volts/mil	500
Dielectric Constant, 1 kHz	4.28
Dissipation Factor, 1 kHz	0.4
Volume Resistivity, ohm-cm	2x10 ¹⁵

INSTRUCTIONS FOR USE:

To use simply insert the cartridge into the application gun and start the plunger into the cylinders using light pressure on the trigger. Next, remove the cartridge cap and expel a small amount of adhesive to be sure both sides are flowing evenly and freely. If automatic mixing of resin and hardener is desired, attach the mixing nozzle to the end of the cartridge and begin dispensing the adhesive. For hand mixing, expel the desired amount of the adhesive and mix thoroughly. Mix approximately 15 seconds after uniform color is obtained.

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.

WARNING!

Although the system contains low volatility materials, care should be taken in handling. Adequate ventilation of workplace 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.

STORAGE & SHELF LIFE:

Product shall be ideally stored in a dry location in unopened containers at a temperature between 20°C to 28°C unless otherwise labeled. The shelf life of these materials is 12 months 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.