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TECHNICAL BULLETIN

SetWORX™ 1510

TOUGHENED, FAST SET EPOXY ADHESIVE

SetWORXTM 1510 is a fast setting, toughened epoxy adhesive designed for industrial grade applications. This epoxy system has 1:1 mixing ratio by volume & cure fast at room temperature. When cured it is resistant to a wide range of chemicals and solvents, and acts as an excellent electrical insulator. The cured adhesive exhibits high impact resistance and exceptional bond strength. It can be used for bonding glass, metals, woods and some plastics.

Features & Applications:

- ➤ ISO-10993-5 compliant for cytotoxicity
- Field Assembly: Dispense via dual cartridge.
- Optics: active alignment of optics such as lenses, prisms, diodes, filters, etc. to opto-circuit
- Fiber Optics: Field assembly of connectors and couplers; also suggested for fiber optic splicing.
- Medical: adhesion to most metals, plastics, ceramics, and glasses found in tubing, substrates or housing.
- General: arts and crafts repair, restoration, and hobbyists.

TYPICAL HANDLING PROPERTIES:

Adhesive	PART-A
Hardener	PART-B
Mix ratio by weight, (Resin/Hardener)	100/100
Mix ratio by volume, (Resin/Hardener)	1/1
Mixed Viscosity at 25°C, cps	20,000-30,000
Pot Life at 25°C (10 grams), minutes	10-12

Recommended Cure 18-24 hours @ 25°C

TYPICAL CURED PROPERTIES:

Color	Off-White	
Specific Gravity	1.1	
Hardness, Shore D	80	
Lap Shear Strength to Aluminum, psi		
At -55°C	2300	
At 25°C	2800	
At 95°C	150	
Die Shear Strength, psi	1800	
T-peel Strength, pli	45	
Service Temperature range, °C	-55 to 125	
Glass Transition Temperature, °C	>55	
Coefficient of Linear Thermal Expansion, 10 ⁻⁶ /°C		
Below Tg	62	
Above Tg	>200	
Dielectric Strength, volts/mil	450	
Dielectric Constant, 1 kHz	3.2	
Dissipation Factor, 1 kHz	0.02	
Volume Resistivity, ohm-cm	1.0×10^{13}	

INSTRUCTIONS FOR USE:

- 1. Mix Resin: Hardener 100:100 grams by weight or 1:1 by volume 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.

AVAILABILITY:

Available in 50mL, 200mL, and 400mL dual cartridges.

FOR INDUSTRIAL USE ONLY: Practices of good housekeeping, safety and cleanliness should be followed before, during and after use.

<u>WARNING!</u> 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 (MSDS) for additional health and safety information.

SHELF LIFE: one year 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.