

6-602 Rev. A SERIES ULTRA FAST™

GENERAL PURPOSE BONDING ADHESIVE

DESCRIPTION

ULTRA FAST 6-602 Rev. A Series are high strength, structural adhesives that are used in a variety of applications. Tough, resilient bonds form upon exposure to UV/Visible light in applications such as coil terminating, unitizing commutator windings and tamperproofing adjustment screws. 6-602 Rev. A Series adhesives bond well to steel, aluminum and glass surfaces. Ultra Fast 6-602 Rev. A Series can be cured with UV light, heat, or pre-applied activator. Dymax adhesive-activator bonding systems comply with the Montreal Protocol and U.S. Clean Air Act of 1990.

TYPICAL UNCURED PROPERTIES (NOT SPECIFICATIONS)

Solvent Content	None - 100% Reactive Solids	
Chemical Class	Urethane Acrylate	
Appearance	Clear/Straw Liquid	
Flash Point	>93°C (200°F)	
Solubility	Alcohols/Chlorinated Solvents/Ketones	
Toxicity	Low	
Viscosity (20 rpm)	6-602 Rev. A	5,000 cP (nominal) ASTM D-1084
	6-602-T Rev. A	7,000 cP (nominal) ASTM D-1084
	6-602-VT Rev. A	12,500 cP (nominal) ASTM D-1084
	6-602-Gel Rev. A	30,000 cP (nominal) ASTM D-2556

TYPICAL CURED PROPERTIES (NOT SPECIFICATIONS)

Durometer Hardness	D75	ASTM D-2240
Tensile at Break	3325 psi (22.9 MPa)	ASTM D-638
Elongation at Break	28%	ASTM D-638
Modulus of Elasticity	210,000 psi (1450 MPa)	ASTM D-638
Tensile (Lap) Shear (steel to steel)	3,700 psi (25.5 MPa)	ASTM D-1002
Water Absorption (24 h)	5.0%	ASTM D-570
Boiling Water Absorption (2 h)	8.0%	ASTM D-570
Linear Shrinkage	2%	DSTM D-101
Coefficient of Linear Thermal Expansion	100 x 10 ⁻⁶ cm/cm/°C	ASTM D-696
Thermal Limit (brittle/degrades)	-55° to +150°C (-65°/+300°F)	DSTM D-200

*DSTM refers to Dymax Standard Test Method

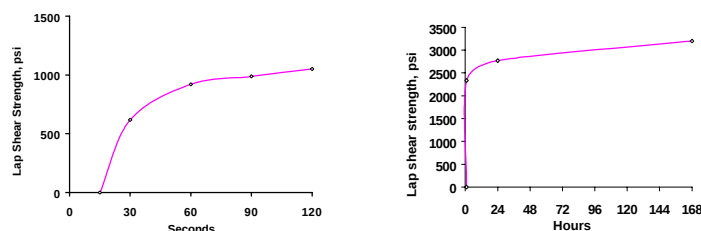
ELECTRICAL

Dielectric Strength	18.9 kV/mm	JISK-6911
Surface Resistivity	3 x 10 ¹² Ω	JISK-6911

CURE DATA - Using 365 nanometer UV light:

	Cure Time (Seconds)	Intensity (mW/cm ²)	Dymax Light-Welder® Lamps
Tack-free cure (1/8-inch bead)	10	150	5000-EC
Depth of cure (1/4 inch)	20	150	5000-EC
Fixture between glass slides	1	50	2000-EC

BOND STRENGTH DEVELOPMENT USING 501-E ACTIVATOR



Shadowed areas can be cured with activator or heat.

Activator is placed on one surface and the adhesive on the mating surface. Curing takes place at room temperature when the parts are mated. Activator requires well-mated parts (up to 0.015-inch gap). Well-mated parts fixture (achieve handling strength) in less than a minute. See Dymax Technical Bulletin "Guidelines for Activator Curing" for complete instructions for all activators.

Heat may be used after UV cure to cure shadowed areas or after activator cure to accelerate cure. The following guidelines depend on the amount of adhesive:

<u>MINIMUM ADHESIVE TEMPERATURE</u>	<u>TIME</u>
110°C (225°F)	60 Minutes
120°C (250°F)	30 Minutes
150°C (300°F)	15 Minutes

DISPENSING AND HANDLING ADHESIVE

Ultra Fast 6-602 Rev. A Series adhesives are available in various packages such as syringes, cartridges, bottles, and pails. They may be dispensed with a variety of automatic bench-top syringe applicators or other equipment as required. Direct questions relating to dispensing and curing systems for specific applications to the Dymax Tech Center at 860-482-1010.

Wear impervious gloves and/or barrier cream. Repeated or continuous skin contact with liquid adhesive will cause irritation and should be avoided. Do not wear absorbent gloves. Remove adhesive from skin with soap and water. Never use solvents to remove adhesive from skin or eyes.

STORAGE AND SHELF LIFE

Store material in a cool, dark place when not in use. Do not expose to UV light or sunlight. Material may polymerize upon prolonged exposure to ambient light. Replace lid immediately after use. Product has a one-year shelf life when stored below 90°F in the original, unopened container.

CAUTION

For industrial use only. Avoid breathing vapors. Avoid contact with eyes and clothing. In case of contact, immediately flush with water for at least 15 minutes; get medical attention. Wash clothing before reuse. Keep out of reach of children. Do not take internally. If swallowed, induce vomiting at once and call a physician. Repeated or continuous skin contact with liquid adhesive will cause irritation and should be avoided. For specific information, refer to the product Material Safety Data Sheet.

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Dymax Corporation - 51 Greenwoods Road - Torrington, CT 06790 - Phone: 860-482-1010 - Fax: 860-496-0608
 E-mail: info@dymax.com - www.dymax.com

Dymax Europe GmbH - Trakehner Strasse 3 - D-60487 Frankfurt am Main - Germany - Phone: (49) 69-7165-3568
 Fax: (49) 69-7185-3830 - E-mail: dymaxinfo@dymax.de

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