Scotch-Weld™
Urethane Adhesive
EC-3532 B/A

Technical Datasheet **September 2010**

Product Description

- 3M™ Scotch-Weld™ Urethane Adhesive EC-3532 B/A is a two-component, polyurethane adhesive which cures at room temperature or with heat to form tough, impact-resistant structural bonds. Scotch-Weld EC-3532 B/A Adhesive provides excellent adhesion to many primed or painted metal and plastic substrates and is non-sag approximately 30 seconds after mixing.
- 3M™ Scotch-Weld™ Structural Adhesive Primer EC-3901 is suggested for use on metal surfaces to achieve maximum resistance to water, humidity and salt spray. (See Primer Information in Directions for Use section on page 2.)

Typical Physical Properties

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Scotch-Weld™ Urethane Adhesive 3532 B/A	**Base**	**Accelerator**
Color (Cured: Brown)	Off-White	Brown
Base	Polyol	Isocyanate
Net Weight (lbs./gal.)	10.3	11.2
Viscosity cps @ 75°F (24°C)	Brookfield RVF #6 sp. @ 20 rpm: 10,000-55,000 cps	Brookfield RVF #5 sp. @ 10 rpm: 15,000-40,000 cps
Mix Ratio: By Weight By Volume	100 100	109 100
Work Life: 100 grams mixed at 75°F (24°C): 5-15 min. **Time to Reach Full Cure @ 75°F (24°C)** 24 hours		

Application and Equipment Suggestions

This product may be applied with spatula, trowel, or flow equipment. Appropriate two-part metering and mixing equipment is also commercially available.

Directions for Use

1. Surfaces to be bonded must be dry and free from rust, oil, grease and wax. Surfaces can be cleaned with an abrasive such as 3M™ Coated Abrasives (240 grit) followed by wiping with a solvent such as MEK (methyl ethyl ketone), MIBK (methyl isobutyl ketone) or Acetone.*

2. **Primer Information:**

   3M™ Scotch-Weld™ Structural Adhesive Primer EC-3901 may be applied by spray or brush. Air dry cycles for periods as short as 1/2 hour have been used successfully with the force dry cycle. Humidity contributes greatly to satisfactory use of this primer. Relative humidity of 25% or lower may cause difficulties and should be thoroughly evaluated in the customers' application.

   The primed surface, after cooling to ambient temperatures, is ready for adhesive bonding. The primed surface should be protected from contamination introduced by dust, fingerprints, oil, etc.

   See Data Sheet for Scotch-Weld Structural Adhesive Primer EC-3901 for directions for use.

   ***Note:** When using solvents, extinguish all ignition sources including pilot lights, read and follow manufacturer's precautions and directions for use.

Typical Performance Characteristics

Overlap Shear Strength-Metals: The following are minimum performance data after a full cure showing the adhesion of 3M™ Scotch-Weld™ Urethane Adhesive EC-3532 B/A to etched aluminum. Data was developed on .063-inch thick 2024 T-3 clad aluminum. Test specimens were 1/2-inch overlap, 1-inch wide with .005-inch thick bondlines pulled at a testing rate of .1-inch/min. All values are psi.

Substrate	**Test Temperature**		
	-40°F (-40°C)	**75°F (24°C)**	**180°F (82°C)**
Etched Aluminum	2500	2200	300

Overlap Shear Strength-Plastics: The following are minimum performance data after a full cure showing the adhesion of Scotch-Weld EC-3532 B/A Adhesive. Data was developed on 1/8-inch thick, 1/2-inch overlap, 1-inch wide specimens with .005-inch thick bondlines that had been abraded and alcohol wiped prior to bonding.

Substrate	**Test Temperature**
	75°F (24°C)
Polycarbonate	700 psi

Storage

Store product at 60-80°F (16-27°C) for maximum storage life. Higher temperatures reduce normal storage life. Lower temperatures cause increased viscosity of a temporary nature. Rotate stock on a "first in-first out" basis.

Shelf Life

This product has a shelf life of one year from date of shipment when unopened and properly stored.

Precautionary Information

Refer to Product Label and Material Safety Data Sheet for health and safety information before using this product. For additional health and safety information, please visit www.3M.com/msds or call 1-800-364-3577 or (651) 737-6501.

For Additional Information

In the U.S., call toll free 1-800-235-2376, or fax 1-800-435-3082 or 651-737-2171. For U.S. Military, call 1-866-556-5714. If you are outside of the U.S., please contact your nearest 3M office or one of the following branches:

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Technical Information

The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

Product Use

Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

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Aerospace and Aircraft Maintenance Department
3M Center, Building 223-1N-14
St. Paul, MN 55144-1000
1-800-235-2376
www.3M.com/aerospace

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