



Scotch-Weld™

Structural Adhesive Primer

EC-1945 B/A

Technical Data

August, 2002

Introduction

3M™ Scotch-Weld™ Structural Adhesive Primer EC-1945 B/A is a two-part chemically curing, corrosion resistant primer. Scotch-Weld Primer EC-1945 B/A improves adhesion of sealers, epoxies, and urethanes to most metals as well as offering increased corrosion protection and exhibits the following features:

- Cures at room temperature
- Excellent adhesion to metals
- Corrosion inhibiting primer
- Excellent sprayability
- Long application time (up to 8 hours)
- Requires no diluent

Description

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

	Scotch-Weld Primer EC-1945 Part B	Scotch-Weld Primer EC-1945 Part A
Component:	Base	Accelerator
Color:	Green	Clear Yellow
Solids Content, % (by weight):	60.5 - 64.5	3.5 ± 1.1
Net Weight, (lbs/gallon):	10.6 - 11.1	7.0 ± 0.2
Viscosity (at 77 ± 2°F): Ford Cup, #4 Orifice Ford Cup, 1/4" Orifice	— 30 ± 10 seconds	12 ± 2 seconds —
Flash Point, (CC):	60°F (Setaflash)	22°F
Mix Ratio (by volume):	1.0	1.0

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Application

3M™ Scotch-Weld™ Structural Adhesive Primer EC-1945 B/A can be applied by dipping, brushing or spraying. For optimum results, Scotch-Weld Primer EC-1945 B/A should be applied to a dry film thickness of 0.2-0.7 mils (0.0002-0.0007 inches).

Application Equipment Suggestions

Note: Appropriate application equipment can enhance primer performance. We suggest the following equipment for the user's evaluation in light of the user's particular purpose and method of application.

Spray Applicator	Air Cap	Fluid Tip	Atomizing Air (PSI)	Fluid Flow (Fl. Oz./Minute approx.)	Fluid Pressure (PSI)
Binks 18 or 62	66SD	63B	25-30	12	2-5
DeVilbiss JGA or JGS	30	FX	25-30	12	2-5

Mixing

Thoroughly mix the base and accelerator at a one to one (1:1) volume ratio. Scotch-Weld Primer EC-1945 B/A, at $77 \pm 2^\circ\text{F}$ in a sealed container, has an application life of approximately 8 hours. (Periodic agitation is necessary.)

Surface Preparation

Substrates must be clean, dry and free of oil, grease, release agents or other contaminants. Substrates such as aluminum can be cleaned satisfactorily using clean dry rags or unsized, lint-free cheese cloth that has been soaked in common cleaners* such as called out in MIL-C-38736.

Curing

Scotch-Weld Primer EC-1945 B/A is an amine cured epoxy in a blended ketone solvent. The primer must contain no solvent prior to the application of the adhesive or sealer. A minimum of 60 minutes @ $75^\circ \pm 5^\circ\text{F}$ is the suggested drying time prior to adhesive or sealer application. Higher temperatures will reduce this drying time and the following is the suggested cure cycles.

- (a) 24 hours @ $75^\circ \pm 5^\circ\text{F}$
- (b) 1 hour @ $75^\circ \pm 5^\circ\text{F}$ followed by 30 minutes @ 180°F or 5 min. @ 250°F .

Note: Cure cycle (b) is the suggested cure to provide maximum toughness and corrosion protection of the primer.

Cleanup

All containers, tools and equipment normally re-used in handling this product should be cleaned before the product has an opportunity to set up or cure. This can be done easily with conventional organic solvents such as methyl ethyl ketone.*

Cured Scotch-Weld Primer EC-1945 B/A can be removed by soaking in a methylene chloride type stripper.*

***Note:** When using solvents, be sure to follow the manufacturer's precautions and directions for use for handling such materials.

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Storage

Store product at 80°F or less for maximum shelf life. Rotate stock so that the oldest shipments are always used first.

Shelf Life

Standard shelf life for 3M™ Scotch-Weld™ Structural Adhesive Primer EC-1945 B/A is 12 months from date of shipment when stored at 80°F or lower.

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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, call 1-800-364-3577 or (651) 737-6501.

For Additional Information

To request additional product information or to arrange for sales assistance, call toll free (800) 235-2376. Our fax number is (417) 869-5219. Address correspondence to: 3M Aerospace Central, 3211 E. Chestnut Expressway, Springfield, MO 65802.

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ISO 9002

This Engineered Adhesives Division product was manufactured under a 3M quality system registered to ISO 9002 standards.



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