



Scotch-Weld™ Structural Adhesive 7240 B/A FR

Preliminary Product Data Sheet

November 2018
Supersedes: April 2018

Product Description

3M™ Scotch-Weld™ Epoxy Structural Adhesive 7240 B/A is a two-part, 1:2 mix ratio adhesive and contains glass beads for perfect control of minimal bond line thickness.

Key Features

- Long open time for large surface application
- Non sag properties
- Contains glass beads for thickness control
- High resistance to environmental exposure

Typical Uncured Properties

	Accelerator (Part A)	Base (Part B)
Base Resin	Modified Amine	Modified Epoxy
Mix Ratio - by volume	100	50
- by weight	100	52
Colour	White	Black
Glass beads for bond line control	Yes, diameter 180 – 300 µm	
Full Cure	2 days at 23 °C	
Application temperature range	15 °C to 30 °C	

	Test method	Unit	Accelerator (Part A)	Base (Part B)
Specific Gravity		g/cm ³	1.1	1.07
Viscosity	Brookfield at 23 °C sp 5 2rpm	mPa.s	106.000	158.000
Work Life	ISO 10364	-	60 minutes for 20g 45 minutes for 50g	

Performance Characteristics

Single Lap Shear - NF EN 1465

Substrate	Temp.	OLS (MPa)
Aluminium 2024 T3 (etched)	-40 °C	23.3
Aluminium 2024 T3 (etched)	23 °C	28.0
Aluminium 2024 T3 (etched)	70 °C	14.7

Floating roller Peel - ISO 2243-2

Substrate	Temp.	Peel (N/cm)
Aluminium 2024 T3 (etched)	23 °C	91.8

Surface preparation

A thoroughly cleaned, dry grease-free surface is recommended for maximum performance. Cleaning methods, which will produce a break free water film on metal surfaces, are generally satisfactory.

- Abrading can be done using 3M™ ScotchBrite™ General Purpose Hand Pad 7447 for metallic fixtures and 3M™ ScotchBrite™ Roloc Surface Conditioning Disc TR Amed (ø 50.8 mm) for substrates.
- Sandblasting can be done with 6 bar pressure using FEPA 220 (53µm) white corundum at an angle of 45° relative to the surface.

The following cleaning methods are suggested for common surfaces:

Steel and Aluminium

1. Wipe free of dust with oil-free solvent such as acetone or isopropyl alcohol.
2. Sandblast or abrade using clean grit abrasives (180grit or finer).
3. Wipe again with solvent to remove loose particles.

If a primer is used, it should be applied within 4 hours after surface preparation.

If 3M™ Structural Adhesive Primer 1945 B/A is used, apply a thin coating (10µm) on the metal surface to be bonded, air dry at 24 °C for 1hr, then cure for 30 minutes at 82 °C, 5 minutes at 120 °C or 3 hours at 25 °C

Note: Aluminium may also be acid sandblasted. Follow the manufacturer's precautions and directions for this procedure).

Plastic/Rubber

1. Wipe with isopropyl alcohol*.
2. Abrade using fine grit abrasive (180 grit or finer)
3. Remove residue by wiping again with isopropyl alcohol*.

Glass

1. Solvent wipe surface using isopropyl alcohol.*

Note: When using solvents, be sure to extinguish all ignition source and follow manufacturer's precautions and directions for use.

Storage & Shelf Life	Store at 16 °C - 25 °C and 40-65 % relative humidity in its original box. The product can be stored up to 36 months after production. <u>Note:</u> The shelf life may be shortened if the original packaging is not properly sealed or stored in an environment with high temperatures or humidity. Rotate stock on a “first in - first out” basis.
Precautionary Information	Refer to product label and Material Safety Data Sheet for health and safety information before using the product. For information please contact your local 3M Office. www.3M.com
For Additional Information	To request additional product information or to arrange for sales assistance, call..... Address correspondence to: 3M
Important Notice	All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method or application. All questions of liability relating to this product are governed by the terms of the sale subject, where applicable, to the prevailing law

Values presented have been determined by standard test methods and are average values not to be used for specification purposes. Our recommendations on the use of our products are based on tests believed to be reliable but we would ask that you conduct your own tests to determine their suitability for your applications. This is because 3M cannot accept any responsibility or liability direct or consequential for loss or damage caused as a result of our recommendations

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