



# Scotch-Weld™ Structural Adhesive 7240 B/A FR

## Preliminary Product Data Sheet

September 2022  
Supersedes: November 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 <sup>3</sup>	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.

<b>Storage &amp; Shelf Life</b>	<p>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.</p> <p><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.</p>
<b>Precautionary Information</b>	<p>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. <a href="http://www.3M.com">www.3M.com</a></p>
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