



Scotch-Weld™

Epoxy Adhesive 7260 FC B/A

Product Data Sheet

Updated : December 2001

Supersedes : February 2001

Product Description

3M Scotch-Weld™ 7260 FC B/A epoxy adhesive is a fast curing, toughened, two-part adhesive. Low flow for ease of application.

Possesses high shear and peel adhesion with very high levels of durability. Contains 300 µm glass beads for accurate glue line control

Excellent adhesion to metallic surfaces and thermosets. Good adhesion to many thermoplastics

Physical Properties

Not for Specification Purposes

	BASE	ACCELERATOR
Base	Toughened Epoxy	Modified Amine
Colour	Grey	Off-white
Specific Gravity (approx.)	1.30-1.36	1.25-1.31
Mix Ratio		
By Volume	100	50
By Weight	100	45
Viscosity (Pa.s at 23°C)	~115	~490
Worklife at 23°C (min)		
10 g	120	
20 g	90	
Time to Handling Strength at 23°C (Hours)	8	
Shelf Life	24 months from date of dispatch by 3M when stored in the original carton at 21 °C and 50% relative humidity.	

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Typical Performance Characteristics

Not for specification purposes

Overlap Shear Strength (MPa)

Test method EN 2243-1

Test conditions	Cure cycle 1	Cure cycle 2	Cure cycle 3
- 55 ± 3°C	NT	29.4 (C)	29.2 (C)
-40 ± 2°C	32.5 (C)	30.0 (C)	30.1 (C)
23 ± 2°C	31.5 (C)	33.5 (C)	31.9 (C)
70 ± 2°C	14.5 (C)	14.9 (C)	18.6 (C)
100 ± 2°C	7.4 (C)	7.5 (C)	8.2 (C)
120 ± 3°C	4.0 (C)	4.2 (C)	4.5 (C)
150 ± 3°C	3.1 (C)	3.2 (C)	3.2 (C)
175 ± 3°C	2.9 (C)	NT	2.9 (C)
200 ± 3°C	2.6 (C)	NT	2.7 (C)

Overlap shear specimens were constructed using 1.6 mm thick 2024 T3 clad aluminium with the surface prepared using the optimised FPL etch.

Typical Performance Characteristics(Cont'd)

Not for specification purposes

Roller (Bell) Peel Strength (N/25mm)

Test method EN 2243-2

Cure cycle 1	Cure cycle 2	Cure cycle 3
120	134	129

Roller (Bell) peel specimens were constructed using 1.6 and 0.5 mm thick 2024 T3 clad aluminium with the surface prepared using the optimised FPL etch

Cure cycles :

1. 7 days at 23 ± 2°C under a pressure of 100 kPa the first 24 hours
2. 16 hours at 35 ± 2°C under a pressure of 100 kPa
3. 120 min at 60-65 °C under a pressure of 100 kPa.

Adhesion Properties

Not for specification purposes

Overlap Shear Strength (MPa)

Test method EN 2243-1

Typical results obtained using overlap shear specimens prepared according to EN 2243-1. All specimens were cured for 2 hours at 65 °C under a pressure of 100 kPa.

Substrate	Overlap shear strength / MPa	Failure Mode
2024 T3 clad aluminium	30.1	Cohesive
5754 H111 aluminium alloy	14.4	Substrate failure (stretching)
Stainless steel	31.3	Cohesive
Hot dip galvanised steel	33.8	Cohesive
Carbon fibre reinforced epoxy	37.2	Substrate failure (delamination)
Glass fibre reinforced phenolic	27.9	Substrate failure (delamination)
Glass fibre reinforced polyester	6.2	Substrate failure

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Environmental Resistance

Not for specification purposes

Overlap shear strength (MPa)

Test method EN 2243-1

Table denotes typical results obtained on 1.6 mm thick optimised FPL etched 2024 T3 bare aluminium after curing for 24 hours at 35 °C. Testing was conducted at 23 ± 2°C.

Conditions	Test results
Control (23 °C / 50% RH)	33.5 (Cohesive)
750 hours dry heat (80°C)	34.4 (Cohesive)
750 hours D.I. water at 23°C	31.9 (Cohesive)
750 hours Jet fuel at 23°C	34.9 (Cohesive)
750 hours diesel fuel at 23°C	32.9 (Cohesive)
750 hours hydraulic oil at 23°C	35.4 (Cohesive)
750 hours 70°C ; ≥ 95 % relative humidity	33.7 (Cohesive)
70°C wet cataplastic -7 days	32.1 (Cohesive)
-14 days	33.4 (Cohesive)
5 % salt spray at 35°C -750 hours	34.1 (Cohesive)*

* Denotes no corrosion under the glue line

Additional Product Information

Work Life:

After mixing, the mixture remains workable for a time before it becomes too viscous to properly wet the surface to which it is applied.

The work life and rate of cure are both greatly affected by temperature and to some extent humidity, curing faster as temperature and humidity are raised.

Once mixed, the adhesive should be used within 90 minutes.

Equipment :

3M Scotch-Weld™ 7260 FC B/A is supplied either in a dual syringe plastic cartridge designed to fit the EPX™ applicator system or via bulk packaging formats.

Contact your 3M representative for assistance in selecting application equipment to suit your specific needs.

Clean Up:

Excess adhesive can be cleaned up prior to curing with 3M Solvent No.2.

Note: 3M Solvent No.2 is flammable. When using solvents for clean up it is

essential that the correct safety precautions are observed.

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Surface Preparation	For high strength structural bonds, paint, oxide films, oils, dust and all other surface contaminants	Must be completely removed. The level of surface preparation will depend on the required	bond strength and environmental resistance required.
Storage Conditions	Rotate stock on a "first in – first out" basis. When stored at room temperature in the original packaging, shelf life is 24 months.		
Additional Information	For any additional information please contact your local 3M representative		
Health & Safety Information	For Health & Safety information, please contact the Product Responsibility Department Tel: 01344 860678		

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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.



Tapes & Adhesives

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