

FIBREGLASS & RESIN SALES PTY LTD

ACN: 053 958 731

111 KEW STREET
WELSHPOOL WA 6106

PH: (08) 9470 2571
FAX: (08) 9361 9243

E-MAIL: info@fibreglass-resin-sales.com.au
WEB PAGE: www.fibreglass-resin-sales.com.au

Multipurpose Epoxy Adhesive FR100

FR100 Epoxy adhesive is a two component solvent free general epoxy adhesive formulated to cure at room temperature to produce high strength waterproof bonds.

One-to-one mix ratio by volume provides ease of mixing. Together with a long working time, FR100 adhesive is a user friendly adhesive particularly suitable for bonding structural elements fabricated from concrete, timber and metal (ferrous and non-ferrous).

PROPERTIES OF FR100 ADHESIVE

Uncured Properties

Resin	Physical State	Cloudy liquid
	Viscosity @ 25°C	10,000 – 15,000 cPs
	Specific Gravity @ 25°C	1.16
	Flash Point	105°C
Hardener	Physical State	Amber liquid
	Viscosity @ 25°C	10,000 – 14,000 cPs
	Specific Gravity @ 25°C	0.93
	Flash Point	110°C

Mix Ratio

100 parts Resin to 100 parts Hardener by volume
100 parts Resin to 80 parts Hardener by weight

Cure Characteristics

Mixed viscosity (@ 25°C)	10,000 cps
Pot Life (@ 25°C – 100grams)	90 minutes
Handling Strength (@ 25°C)	10 hours

Heat Distortion Temperature (HDT)

24 hours @ 25°C	38°C
2 weeks @ 25°C	51°C
Ambient + 8 hours @ 60°C	62°C
Ambient + 8 hours @ 80°C	64°C

Cured Properties of FR100 adhesive – 2 weeks ambient cure @ 25°C

PROPERTY	VALUE
Tensile Strength	50 MPa
Tensile Modulus	2000 MPa
Tensile Elongation	7.2%
Flexural Strength	75 MPa
Flexural Modulus	2300 MPa

Compressive Strength	120 MPa
Compressive Strength	60-80 MPa
Compressive Yield	65 MPa
Izod Impact	1.18 ft-lb/inch notch
Shore D Hardness	82 MPa

Cured Properties of FR100 adhesive – Ambient cure + 8 hours @ 60°C

PROPERTY	VALUE
Heat Distortion Temperature	62°C
Tensile Strength	50 MPa
Tensile Modulus	2200 MPa
Tensile Elongation	11.8%
Flexural Strength	83 MPa
Flexural Modulus	2300 MPa
Compressive Strength	235 MPa
Compressive Strength	60-80 MPa
Compressive Yield	65 MPa
Izod Impact	0.88 ft-lb/inch notch
Shore D Hardness	82 MPa

Preparation

Before Mixing FR100 adhesive, concrete surfaces should be wire brushed to remove laitance; wood and metal surfaces should be abraded to provide a good key; all surfaces should then be cleaned to remove any oil and dust contamination.

Application

Sufficient FR100 adhesive should be applied (to both of the surfaces) to assure intimate contact between the bonding surfaces. Excessive clamping pressures should be avoided. FR100 adhesive requires only sufficient pressure to stop the bonded components from moving during the curing process.

Depending on the porosity and surface roughness, one litre of mixed FR100 adhesive will cover approximately three (3) square metres.

Clean Up:

Any spillages should be cleaned up as they occur. Use dry sand or sawdust to soak up bulk or large spillage's, and deposit into waste drums. Clean up small spillage's tools and equipment with Acetone or warm water and detergent before the material has time to set.

Caution: Acetone should only be used in well-ventilated areas. Avoid direct skin contact.

HEALTH & SAFETY

Avoid contact with the skin and eyes by wearing protective gloves, clothing and eye wear when dispensing, mixing and using.

- If skin contact occurs, remove contaminated clothing and wash skin with warm water and ATL Composites' 845 Skin Cleaner. If discomfort persists seek medial attention.
- If eye contact occurs, hold open eyes and flood with clean water for at least 15 (fifteen) minutes and seek medical advice.
- If swallowed, do not induce vomiting, give plenty of milk and contact a doctor or the Poisons Information Centre.

NOTE: Our products are intended for sale to industrial and commercial customers. We request that customers inspect and test our products before use and satisfy themselves as to contents and suitability. Nothing herein shall constitute a warranty; express or implied, including any warranty or merchantability or fitness, nor is protection from the law or patent to be inferred. All patent rights are reserved. The exclusive remedy for all proven claims is replacement of our materials and in no event shall we be liable for special or consequential damages.