

Technical Data Sheet

K106 High Strength Structural Epoxy Bonding System *allnex*

DESCRIPTION:

K106 (Previously known as K2001) is a high strength 24 hour cure epoxy. Higher performance than standard epoxies. (E.g. K214).

TYPICAL FEATURES | BENEFITS:

- Simple 1:1 mix ratio.
- Bonds to many surfaces.
- User friendly.
- Cure above +10°C.
- Gap filling.
- Interior | exterior application.

PERFORMANCE DATA:

Minimum Application Temperature: Air	+10°C
Flash Point:	>100°C
Lap shear strength N/mm ² :	16
Water Vapour Permeability (1mm thick):	16g/m ² /24hour
Maximum operating temperature:	+60°C
Adhesion Properties to correctly prepared surface: ~ Composites ~ Concrete ~ Metal ~ Timbers	Excellent Excellent Excellent Excellent
Appearance: ~ Resin ~ Hardener	Viscous Opaque Liquid Viscous Pale Yellow Liquid

RECOMMENDED USES:

- Bonds Concrete | Metals | Timbers | Composites | Some plastics.
- Boat Building.
- Electronic assemblies.
- Construction | Industrial uses.
- Golf club heads.

NOT RECOMMENDED:

- Application below +10°C air temperature.
- Bonding Polypropylene and polyethylene.
- Application to incorrectly prepared surfaces.

HEALTH & SAFETY: Refer safety data sheets (SDS).

- Wear gloves wherever possible.
- Wash hands with warm, soapy water after any skin contact.
- Re-seal all containers tightly.

SURFACE PREPARATION:

The surface to be filled/repared must be clean and sound.

Remove all dust, dirt, oil, scale, laitance, paint or any other contaminates.

Concrete: Acid etch | Shot blast | Diamond grind | Needle gun.

Metals: Degrease with Acetone > Abrade with medium grit abrasive paper > Degrease with Acetone again.

Timber: Prepare by way of mechanical sanding using 80 grit paper.

Composites: Degrease > Mechanically abrade > Degrease.

PRODUCT PROPERTIES:

Pot Life (Usable Life) Pot life is based on 100gram samples. Large quantities of mixed epoxy will generate heat and the pot life may be significantly reduced.	+15°C– 50%RH +20°C– 50%RH	150 minutes 120 minutes
Cure Time	+20°C –50%RH +40°C –50%RH	15 hours 3 hours
SG kg/litre ~ Resin ~ Hardener	1.15 0.90	
Density Kg/Litre -cured	1.05	
Coverage ~ General bonding	Use as required: (0.001m ³ = 1 Litre) e.g. 1 litre covers 1m ² @ 1mm thick. 3m ² /Litre	
Clean up	Wash hands with warm soapy water after any skin contact Solvent HA for tools	
NZ Dangerous Goods Class ~ K106 Kit	Hazard Class 9 Packing Group III	
Packaging ~ K106 Kit	1 litre Kit	
Shelf Life	24 months from date of manufacture. (After this period consult with allnex).	

K106 MIXING RATIO: By weight

Resin	100 parts
Hardener	80 parts

K106 MIXING RATIO: By volume

Resin	100 parts
Hardener	100 parts

**** Note**** Refer Cautions Section.

The mix ratio must not be altered.

The mix ratio is the only acceptable formula.

Adding more hardener will make the mix softer and it will be uncured.

Increased hardener levels will result in a weaker product.

MIXING METHOD:

Carefully mix the product according to the stated mix ratio. Mix until uniform and no streakiness is evident.

APPLICATION METHOD:

Notched Trowel | Spatula

Apply mixed adhesive.

Clamp surfaces together for curing period, or hold without movement for required cure period.

CAUTION:

K106 is a two part epoxy that is mixed in the specified ratio. Only this ratio will produce a hard, non-softening product. Adding more hardener (with the aim of making the product cure faster) will not work and will only result in making the product softer. The more hardener that is added, then the softer it will become. No matter how long it is left, it will never harden.

Only the stated mix ratio will work and exhibit the stated performance data.

****Note****

Inadequate mixing, incorrect mix ratios or movement before cure are the normal reasons for joint failure.

OTHER EPOXIES AVAILABLE:

- K36 - Clear Laminating Resin.
- K78 - Crack Repair.
- K80 - Pourable Grout.
- K83 – Machinable Epoxy Grout
- K102 - High Viscosity Mortar.
- K106 - Structural 24 hour Adhesive.
- K125 - Concrete Repair Paste.
- K130 - Control Joint Filler.
- K138 - High Strength, Structural Heat Resistant Adhesive.
- K214 - General Purpose Adhesive.
- K219 - Structural 5 Minute Adhesive.
- K2005 – High Peel Strength Structural Adhesive.
- Fairing Cream - Sandable Smoothing Paste.
- Truestik EA - Flexible Adhesive – Multipurpose.

EPOXY SELECTION CHART:

http://www.allnexconstruction.com/pdf/Epoxy_Uses.pdf

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Allnex Construction products, a Division of Allnex New Zealand Ltd

Auckland - 14 Industry Road Penrose phone: 095836544. Hamilton - 18 Somerset Street Frankton phone: 07-847-8658

Wellington - 19A Jamaica Drive Grenada North phone: 04-240-0305. Christchurch - 112 Carlyle Street Sydenham phone: 03-366-6802

Customer Service: 0508-882-288 cs.constructionnz@allnex.com

www.allnexconstruction.com

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