

Technical Data Sheet

K106 High Strength Structural Epoxy Bonding System

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:

Properties	Values	
Minimum application temperature: Air	+10°C	
Flash point:	>210°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	
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	
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
Clean up:	Wash hands with warm soapy water after any skin contact Solvent HA for tools	
NZ Dangerous Goods Class:	~ K106	Refer: SDS
Packaging:	~ K106 Kit	1 kg
Shelf Life:	24 months from date of manufacture. (After this period consult with allnex).	

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.

MIXING RATIO**K106 Mixing Ratio - By weight**

Element	Value
Resin	100 part
Hardener	80 part

K106 Mixing Ratio - By volume

Element	Value
Resin	1 part
Hardener	1 part

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.
- K273- Underwater Cure Mortar.
- K2005 - High Peel Strength Structural Adhesive.
- Fairing Cream - Sandable Smoothing Paste.
- Truestik EA - Flexible Adhesive – Multipurpose.

EPOXY SELECTION:

Refer: Epoxy Selection Chart.

Date: August 2021
Replaces: Sept 2019

Allnex Construction Products, a Division of Allnex New Zealand Ltd
Auckland - 14 Industry Road, Penrose. phone: 09-583-6544.
Hamilton - 18 Somerset Street, Frankton. phone: 07-847-8658.
Wellington - Unit 9A, 4 Glover Street, Ngauranga Gorge. 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

The logo for Allnex, featuring the word "allnex" in a lowercase, sans-serif font. The letters "a", "l", "l", "n", and "e" are white, while the "x" is a dark blue. A horizontal line with a color gradient from purple to green passes through the middle of the "x".

DISCLAIMER: This information appearing in this Document (**Details**) concerning the product which is the subject of the Document (**Product**) is either based on present technical knowledge and tests done by allnex or tests done by, and data supplied from third parties including you, the customer. Since the actual use by you and by others of the Product is beyond the control of allnex, no warranty or representation, express or implied is made by allnex regarding the suitability for such use, nor does allnex accept any liability arising out of the use by you of other products or materials, whether third party or not, that may be referred to in this Document. allnex recommends that you carry out your own tests as to the suitability of the Product for your purpose, regarding which you accept full responsibility. In addition, if any of the Details appearing in the Document are based upon tests done by, and/or data supplied by any third party, allnex provides no warranties or representations in connection with those Details and you, the customer waives any right you may have against allnex in connection with the accuracy, completeness or otherwise of the Details. The information in this Document is not to be construed as absolutely complete or accurate since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations affecting use of the Product. allnex does not provide any warranty or representation to you that the Product does not infringe the intellectual property rights of any third party. All orders accepted shall be subject to the standard conditions of sale of allnex which are on the back of our invoice. In accepting the Product you, the customer acknowledge and agree: **a.)** The Product is or may be of a hazardous nature and that you, the customer, are responsible for the disposal of the container housing the Product in accordance with the requirements and regulations of the relevant supervising government. **b.)** The Product has a limited shelf life and must be stored strictly in accordance with the guidelines and specifications related to it. **c.)** Where the Details relate to Product tested by allnex, those Details are indicative only, regarding which there may be batch to batch variation. **d.)** allnex gives no warranty or representation as to the applicability for the particular use by you, the customer, of the Product and you the customer shall be responsible for ensuring that the Product is fit for your intended use. **e.)** allnex's liability for breach of any term, condition, guarantee or warranty (express or implied and concerning the information in this Document or the Product more generally) including any liability for direct or indirect consequential loss (including indirect loss of profits), is limited to the maximum extent permitted by law and, at allnex's election, to either replacing or repairing the goods or paying the cost of replacing or repairing the goods, or in the case of services, supplying the services again.