

Technical Data Sheet



K36 Coating and Laminating Epoxy System

DESCRIPTION:

K36 is a general purpose, clear, fluid epoxy resin for coating, encapsulating and laminating (fibreglass). It forms a hard, durable and water resistant finish. It has no odour and is non-flammable. It is non-shrink and will give a thick, glossy durable finish.

TYPICAL FEATURES | BENEFITS:

- Clear, Transparent.
- Fluid Mix.
- User friendly.
- Cure above +15°C.
- Bonds to Metal | Concrete | Timber.
- High Gloss

PERFORMANCE DATA:

Properties		Values	
Minimum application temperature: Air		+15°C	
Flash point:	~ Resin ~ Hardener	>155°C >117°C	
Tensile bond strength:		10 - 12 MPa	
Tensile Shear strength:		9 - 10 MPa	
Compressive strength:		70 - 90 MPa	
Flexural strength:		35 - 40 MPa	
Maximum operating temperature:		+60°C	
Adhesion Properties to correctly prepared surface:	~ Concrete ~ Metal ~ Timbers	Excellent Excellent Excellent	
Appearance:	~ Resin ~ Hardener	Clear Liquid Thin Clear Liquid	
SG kg/litre:	~ Resin ~ Hardener	1.15 1.00	
Density Kg/Litre -cured:		1.05	
Coverage:		Use as required: (0.001m ³ = 1 Litre) e.g. 1 litre covers 1m ² @ 1mm thick	
Pot Life: (Usable Life) <small>Pot life is based on 100gram samples. Large quantities of mixed epoxy will generate heat and the pot life may be significantly reduced.</small>		+15°C– 50%RH +20°C– 50%RH	60 - 80 minutes 30 - 40 minutes
Cure Time - Concrete Failure:		+18°C –50%RH	24 hours - Best after 48 hours Faster cure at 25 – 35°C
Clean up:		Wash hands with warm soapy water after any skin contact Solvent HA for tools	
NZ Dangerous Goods Class:	~ K36 Kit	Refer: SDS	
Packaging:	~ K36 Kit	1.5 litre Kit 6 litre kit	
Shelf Life:		24 months from date of manufacture. (After this period consult with allnex).	

RECOMMENDED USES:

- Coating bench tops in laboratory or bar tops.
- Encapsulating articles, artworks, souvenirs.
- Sealer, preservative, floor sealer.
- For mixing with aggregate to make trowelled durable topping for hard wearing and resistant floors.
- Combined with fibreglass cloth for laminates, boats and model building, repairs.
- Clear coating for timber.
- Coating jewellery, badges.
- Chemical resistant lining.

NOT RECOMMENDED:

- Application below +15°C air temperature.
- Bonding Polypropylene and polyethylene.
- Not suitable for long periods in exterior situations. (Will yellow under UV condition).
- 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.

Cracks: Blow cracks clear with clean, dry oil free compressed air.

MIXING RATIO**K36 Mixing Ratio - By weight**

Element	Value
Resin	2 parts
Hardener	1 parts

K36 Mixing Ratio - By volume

Element	Value
Resin	2 parts
Hardener	1 parts

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.

Mechanically mix at a low speed (300rpm).

Scrape sides of pail and mix again

Mix until uniform and no streakiness is evident.

Note**Double Mixing Procedure**

Once mixed transfer mix to a clean pail and mix again. (Any unmixed material will cause "soft spots" in benchtop finishes).

APPLICATION METHOD:

Trowelled | Poured | Roller | Brush

Note

The installation of this product is speciality work and consideration should be given to the use of a competent installer.

APPLICATION:

Use above +15°C (best results above +20°C).

Slow cure caused by low temperatures may cause unusual surface flaw effects.

Benchtops:

******Observe the double mixing process in "mixing" above******

Apply with a notched trowel. Allow to flow to level, (contained edges).

The product may be heated with a broad blue oxidising flame to release air and to level. ****Note** (no solvents).**

Will cure rapidly in a warm environment.

Cure in conditions above 20°C to achieve a rapid gelation.

Do not cast in layers exceeding 5mm thick in one single coating.

Not suitable for long periods in exterior situations. (Will yellow under UV condition).

Fibreglass Laminating:

Apply mixed K36 to substrate, apply glass cloth or chopped strand mat (CSM options: 225, 300, 450 gsm).

Apply more K36 and roll evenly with a laminating roller.

For General Timber Work Use:

K36 to make:

Adhesive: add fumed silica. - Option: Refer K214 Technical Literature

Sanding paste: add micro-balloons and maybe also fumed silica. – Option: Refer Fairing Cream Technical Literature

Reinforced adhesive or paste: add micro-fibres.

Floor Coating: ****Caution**** will yellow slightly over time.

Note

The dilute and concentrate options below will give very different effects on concrete.

Option 1. Dilute: - ****Caution**** flammable system.

Mix 3 litres of **mixed K36** with 6 litres of Solvent HA. Mix well. Apply to concrete or timber floors with a roller. Apply one or two coats depending on effect required.

Option 2. - Concentrate:

Apply neat material as in (Benchtops) above. Normal application rate for a 1mm film is 1m²/litre.

TROWELLED FLOOR TOPPING:

K36 Resin Floor Topping Mix:

Element	Value
Resin - Part A	2.8kg
Hardener - Part B	1.4kg
STZ Flooring Sand	25kg

Mix the K36 Resin and Hardener followed by the addition of the STZ flooring aggregates in the quantities as above, Trowel the mix onto the correctly prepared (roughened) concrete.

CAUTION:

K36 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.

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.

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