

MANUAL SECTION	ISSUE DATE	AUTHORISED	REPLACES	PAGE
Construction Products	March 2010	PM	March 2003	1 of 2

K36 COATING & LAMINATING EPOXY RESIN

Based on Nuplex Epoxy Technology

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.

FEATURES

- Clear, transparent
- Fluid
- Relatively low yellowing

- High gloss

BENEFITS

- Very little colour
- Pourable, Easy to apply, wets fibreglass
- Good colour retention (however it will slowly gain a yellow tone in sunlight).
- Attractive

NORMAL END USES:

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

TYPICAL PROPERTIES:

	<u>RESIN</u>	<u>HARDENER</u>
Appearance:	Clear liquid	Thin clear liquid
Specific Gravity:	1.15	1.0
Flash Point:	>100°C	>100°C
Shelf Life:	>24 months	>24 months

MIX RATIO:

	<u>by weight & Volume</u>	
A-Resin	2	<i>This mix ratio, 2:1, is the only permissible ratio. More hardener will result in an uncured, soft system.</i>
B-Hardener	1	

POT LIFE:

(Usable Life)

<u>@ 15°C</u>	<u>@ 20°C</u>
60-80 minutes	30-40 minutes

CURE TIME:

Hard after 24 hours but **best** after 48 hours at 18°C. Faster if cured at 25-35°C.

COVERAGE:

Use as volume required (0.001m³ = 1Lt)
1Lt covers 1m² @ 1mm thick

SURFACE PREPARATION:

Timbers: Sand clean and smooth
Metals: Grind clean and bright, wipe with Solvent HA.

No warranty either expressed or implied or statutory is made by NUPLEX in this document except as expressly stated in any sale and purchase agreement entered into between NUPLEX and the buyer. CERTIFIED ISO 9001 REG. NO. 158. This document is a technical data information sheet. The description of the product or products and the properties of the product or products contained in this document is for the sole purpose of identifying the product or products and describing their property or properties and does not constitute a warranty that the product or its properties shall conform to that description; nor is the description of the product and/or its properties a warranty by NUPLEX that the goods are suitable for a particular purpose.

MIXING INSTRUCTIONS:

Carefully mix the product according to the stated mix ratio. The mix ratio is the only acceptable formula. Increased hardener levels result in a **weaker** product. Signs of **incorrect mix ratios**:

- Soft, tacky resin even after 24 hours or the resin mix looks hazy or streaky.
- Overly flexible; it should be stiff.
- The cured product softens with low temperature heat.

Mix until uniform and no streakiness is evident. When used as a coating it is critical to mix it very well and it is **best** to transfer mixed material to clean vessel and mix again. Drops of un-mixed material can ruin a surface. Large castings and material in the pail will generate heat and crack. If mixing with other materials, always mix A&B well before adding other materials

APPLICATION:

Use above 15°C (best above 20°C). Slow cure caused by low temperatures may cause unusual surface flaw effects. Take care mixing. Mix carefully and uniformly. Change to a clean pail and mix again. Generally, K36 is for interior use.

- a) **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. Cure rapidly in a warm environment. ****Caution**** (no solvents). Cure in conditions above 20°C to achieve a rapid gellation. Do **not** lay more than 5mm thick in one single coating. **Not** suitable for long periods in exterior situations.
- b) **Laminating:** Apply mixed K36 to substrate, apply glass cloth or chopped strand mat (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 |
| Sanding paste: | add micro-ballons and maybe also fumed silica |
| Reinforced adhesive or paste: | add micro-fibres |
- c) **Floor Coating:** (note: dilute and concentrate will give very different effects on concrete)
- (i) **Dilute:** 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 (****caution**** flammable).
- (ii) **Concentrate:** Apply neat material as in (a) Benchtops above. Normal application rate for a 1mm film is 1m²/litre. ****Caution**** will yellow slightly over time.
- d) **Trowelled Topping:** Premix k36 A&B in the 2:1 ratio. Then mix mixed K36 with STZ flooring aggregates at a ratio of 1:5. ie 4.2 kg mixed K36 to a 25kg bag of STZ flooring sand. Trowel onto prepared (roughened). concrete

Seek advice if in doubt: ncpsales@nuplex.co.nz

COLOURING: May be tinted with Nuplex epoxy colour pastes.

HEALTH AND SAFETY:

Use gloves wherever possible. Wash hands with warm, soapy water after any skin contact. Re-seal all container tightly. Clean up with Solvent HA while wet; aggressive paint stripper when cured.

CURED PROPERTIES:

Maximum Operating Temperature:	60°C
Density kg/L:	1.05
Water Absorption:	low