Technical Data Sheet

K219 5 Minute Gel - Epoxy Adhesive System



DESCRIPTION:

K219 (Previously known as K2002) is a versatile rapid curing industrial grade epoxy adhesive with good handling properties for many applications

TYPICAL FEATURES | BENEFITS:

- Simple 1:1 Mix.
- Interior | exterior application.
- User friendly.
- Low temperature cure.
- Short process time.

PERFORMANCE DATA:

| Properties | | Values | |
|--|--|---|---|
| Minimum application temperature: Air | | +0°C | |
| Flash point: | | >100°C | |
| Lap Shear Strength: | | 15 | |
| Water Absorption % /24hrs | | 1.1 - 1.5 | |
| Compressive strength: | | 30 - 40 MPa | |
| Flexural strength: | | 30 - 40 MPa | |
| Maximum operating temperature: | | *40°C | |
| Adhesion Properties to correctly prepared surface: | | | |
| | ~ Composites ~ Concrete ~ Metal ~ Rubber ~ Timbers | | Excellent Excellent Excellent Very Good Excellent |
| Appearance: | | | |
| | ~ Resin ~ Hardener | Cream Paste Opalescent paste - strong odour | |
| SG kg/litre: | ~ Resin | 1.10 | |
| | ~ Hardener | 1.10 | |
| Density Kg/Litre -cured: | | 1.10 | |
| Coverage: | | Use as required: (0.001m ³ = 1 Litre) e.g. 1 litre covers 1m ² @ 1mm thick | |
| ~ General Bonding | | 3m ² /Litre is normal depending on gap filling required. | |
| 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. | | 0ºC− 50%RH *15ºC− 50%RH *20ºC− 50%RH | Long 8 minutes 5 minutes |
| Cure Time: | | 0ºC –50%RH ⁺10ºC– 50%RH ⁺23ºC– 50%RH | 8 hours 4 hours 2 hours |
| Clean up: | | Wash hands with warm soapy water after any skin contact Solvent HA for tools | |
| NZ Dangerous Goods Class: | ~ K219 | Refer: SDS | |
| Packaging: | ~ K219 Kit | 1 kg | |
| Shelf Life: | | 24 months from date of manufacture. (After this period consult with allnex). | |
| | | | |

- Cure above 0^oC.
- Bonds to many surfaces.
- Gap filling.
- Very rapid cure.

RECOMMENDED USES:

- Bonds Concrete | Metals | Timbers | Composites | Some plastics.
- Boat Building.
- Laminates Plywood.
- Flooring adhesive for timber flooring. •

NOT RECOMMENDED:

- Application below 0°C air temperature.
- Bonding Polypropylene and polyethylene.

- Construction | Industrial uses.
- Golf club heads.
- Flooring adhesive for rubber to concrete or timber.
- Flooring adhesive for most rigid vinyl tiles. •
- 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/repaired 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: Composites: Degrease > Mechanically abrade > Degrease.

MIXING RATIO

K219 Mixing Ratio - By weight

| K219 Mixing Ratio - By weight | | K219 Mixing Ratio - By volume | |
|-------------------------------|--------|-------------------------------|--------|
| Element | Value | Element | Value |
| Resin | 1 part | Resin | 1 part |
| Hardener | 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

General bonding:

Apply the mixed adhesive to the substrate with a notched trowel or spatula at the recommended spread rate. Clamp surfaces together for curing period, or hold without movement for required cure period.

Note

Work rapidly as the product has a very short pot life.

CAUTION:

K219 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.

EPOXY SELECTION:

Refer: Epoxy Selection Chart.

- 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.

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