

Technical Data Sheet

Knead-It Underwater

Update

2014

DESCRIPTION

KNEAD-IT UNDERWATER is a hand kneadable, fast setting co-extruded epoxy repair system that can be used for repairing a multitude of things. It is especially suitable for application to damp, wet or underwater substrates. It comes in a handy roll form, with the white hardener encapsulated in the aqua green resin part. The product hardens in 20 - 30 minutes after mixing, to a white solid material. Fast grab - high initial holding minimises slippage when adhering on vertical surfaces.

SIZE AVAILABLE

Available in a 110g roll.

USES

- For fast and permanent repairs to damp and wet substrates, and even for underwater repairs.
- Patching dings, scratches, cuts, gouges and holes in fibreglass, metal and wooden boat decks and hulls.
- Repair of pipes, fittings, electrical connections, water tanks, tubs, sinks, spas, hot tubs, tanks, pools, leaking gaskets.
- Forming custom gaskets etc.
- Ideal for emergency in-water repairs.

TECHNICAL FEATURES

- Will not sag, run or drip.
- Easy to use - no mess.
- For use on glass, ceramics, masonry, metal, timber, fibreglass and some plastics.
- Can be drilled, sawed, sanded, filed, tapped, machined or painted one hour after mixing.
- Good adhesive strength.
- Good gap filling properties.
- Heat resistant to 120°C continuously or 140°C intermittently.
- Can be used under fresh or salt water.

LIMITATIONS

- Does not adhere to polyethylene, polypropylene or Teflon® (polytetrafluoroethylene).
- Set time increases at temperatures below 20oC.
- Not recommended for filling joints/cracks subject to movement as the cured product is extremely hard and inflexible.
- Use **KNEAD-IT MULTIPURPOSE** for applications in contact with drinking water.

TECHNICAL DETAILS

Working Life	20-30 minutes
Non-Volatile Content	100%
Density	1.9g/mL
Shrinkage	<1%
Hardness, Shore D	65-75 (after 24hrs@25°C)
Lap Shear	4,500-6,000kPa
Tensile Strength	(25x25x1mm, steel)
Compressive Strength	80,000kPa (24hrs cure@25°C)
Electrical Resistance	30,000megohms (ASTM D257)
Dielectric Strength	11,800 Volts/mm (ASTM D149)
Upper Temperature Limit	Continuous - 120°C Intermittent - 140°C
Chemical Resistance	Resistant to hydrocarbons, ketones, alcohols, esters, halocarbons, aqueous salt solutions and dilute acids and bases.
Shelf Stability	+18 months

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HOW TO USE

1. Clean surface free of grease, dirt and dust. For best results roughen bond area prior to cleaning.
2. Cut off required amount. Replace disc on remaining portion. To mix, knead with fingers to uniform colour. If mixing is difficult, warm to room temperature. Wear gloves to avoid messing hands.
3. Apply to surface to be repaired (within 12 minutes of mixing) and work the material forcefully into the surface applying pressure until adhesion begins to take effect. Mould to shape if required. If material sticks to fingers, use the plastic wrapper to press the material in place.
4. For a smooth appearance, remove excess and hand rub with water or a damp cloth before hardening begins.
5. After 20-30 minutes **KNEAD-IT UNDERWATER** will harden and begin to form a strong bond. Allow for longer cure times at lower temperatures.
6. After 60 minutes **KNEAD-IT UNDERWATER** may be drilled, sanded, machined, filed, sawed or painted.
7. Wash hands thoroughly with soap and water after use.

WARNINGS/FIRST AID

Where possible wear protective gloves when using **KNEAD-IT UNDERWATER**. Contact with skin may result in irritation. Epoxy resin is a known skin sensitiser. Repeated or prolonged skin contact may lead to allergic contact dermatitis. If redness or swelling of skin occurs, wash thoroughly with soap and water. Seek medical attention if in any doubt. Mixed and cured material is not hazardous. Cured material can only be removed by cutting and abrasion. If cured on skin, it will peel off in a few days without assistance. Soaking in warm water will assist removal.

SHIPPING/STORAGE/DANGEROUS GOODS INFORMATION

Dangerous Goods Classification: Not restricted

Store in a cool place for maximum shelf life.