# **Technical Data Sheet**



Version 2.0 Updated 02/12/2020

# KNEAD IT STEEL

## **Description**

Selleys Knead It Steel is a hand kneadable, fast setting co-extruded epoxy repair system that can be used to rebuild, reshape or repair items made of metal in minutes. It comes in a handy roll with the black hardener encapsulated in the grey resin part and turns to a dark grey colour when after mixing.

#### **Product Information**

Packaging	Size
Plastic Tube	110g

#### Uses

### Ideal for:

- Repairing small engine parts, radiators, petrol tanks, etc.
- Sealing leaks and filling cracks & voids in iron pipes, tanks, gutters, gaskets, battery cases, tools and equipment.
- Fabricating nuts & bolts missing machine parts, etc.
- Repairing rust-damaged equipment bodies, metal gutters, downspouts and ductwork.

## **Features**

- Adheres to metal surfaces as well as other surfaces, providing a long-lasting finish.
- Industrial strength
- Easy to use no mess
- For use on steel, ferrous metals, aluminium, other metals, glass, concrete, timber and most plastics\*.
- Can be machined, drilled, sawed, sanded, filed, and painted when fully cured.
- · Heat resistant.

#### **Technical Details**

Property	Typical Result
Technology	Ероху
Colour	Black hardener encapsulated in the grey resin part. Dries to a dark grey colour
Density	Uncured: ~2.0g/ml Cured: ~2.2g/ml
Application Temperature	5 to 40°C

Heat Resistance	Continuous: -40 to +120°C Intermittent: -40 to +140°C
Initial Cure Time	60minutes
Full Cure Time @ 25°C	24hours
Working Time @ 25°C	3 to 5minutes
Shore D Hardness (at full cure) (ASTM D2240)	80±2
Volumetric Shrinkage	~4%
Non-Volatile Content	~100%
Lap shear tensile strength (on steel: 25 x 25 x 1.5mm (ASTM D1002)	6±0.5MPa
Compressive strength (ASTM D695)	~50MPa
Dielectric Breakdown Strength (ASTM D149)	~7500 kV/m
Chemical Resistance	Resistant to hydrocarbons, esters, ketones, alcohols, halocarbons, aqueous salt solutions, and dilute acids and bases. (For suitability, pre-test a small cured sample with dilute acid & bases).

Typical properties are for information only, not for purposes of specification. The data above represents product performance in ideal laboratory conditions. Individual users' experience may vary depending on application conditions.

## **Surface Preparation**

Ensure surface is free of grease, dirt and dust.
For best results, roughen bond area by scuffing or sanding prior to cleaning.

#### **Directions for Use**

- Wear gloves. Cut off required amount. Replace disc on remaining portion. Knead with fingers until a uniform colour is achieved. If mixing is difficult, allow the polymer to warm to room temperature.
- Apply to surface to be repaired (within 2 minutes of mixing); apply pressure to force the adhesive into surface or mould to required shape.
- For a smooth appearance, remove excess adhesive and hand rub with water or a damp cloth before hardening begins.

Head Office 1 Gow Street, Padstow, NSW, 2211, Australia. Tel: 1300 555 205 (Aus); 0800 735 539 (NZ), Email: support.selleysau@selleys.com

All information contained in this Product Information Sheet is as accurate and up-to-date as possible at the time of printing. Products can be expected to perform as indicated in this sheet, so long as application procedures and maintenance are followed as recommended. Any other warranties that may be implied are expressly excluded, except the consumer guarantees under the Australian Consumer Law, where applicable, or any other non-excludable warranties under any State legislation, where applicable.

# **Technical Data Sheet**



Version 2.0 Updated 02/12/2020

# KNEAD IT STEEL

- In ~5 to 10minutes, Knead It Steel will harden and begin to form a strong bond.
- Knead It Steel may be drilled, sanded, machined, filed, sawed or painted after 60 minutes.

## **Safety Tips**

- Wear impermeable gloves when mixing or handling uncured product.
- Wash hands thoroughly with soap and water immediately after handling before product hardens.
- Avoid breathing dust and use a dust mask when sanding.
- Turn off power when doing repairs with electrical items.

### Clean Up

 Clean up with damp cloth before adhesive hardens.

### Storage

- Store in a cool, dry, well-ventilated place and out of direct sunlight.
- Store away from foodstuffs.

### Limitations

- Set time increases at temperatures below 20°C.
- \*Does not adhere to Polyethylene, Polypropylene or Teflon® (Polytetrafluoroethylene).
- Not recommended for filling joints and cracks subject to movement as the cured product is extremely hard and not flexible.
- Not intended for use in structural applications.

## Warnings, First Aid and Shipping Information

This information can be located on the product SDS available on Selleys website: www.selleys.com

Head Office 1 Gow Street, Padstow, NSW, 2211, Australia. Tel: 1300 555 205 (Aus); 0800 735 539 (NZ), Email: support.selleysau@selleys.com