

# **KE020**

# Reinforced, Two Part Epoxy Putty

### **Description**

KE020 is a hand-mixable, non-rusting, aluminium reinforced, epoxy repair putty that mixes and is ready to use in just one minute.

When mixed, KE020 has the consistency of modelling clay and can be moulded into shapes, wrapped around or used to build up and repair just about anything. KE020 can be machined, ground, drilled, filed, sanded and painted after 60 minutes.

## Typical Applications

KE020 will bond a wide variety of substrates, including metals, woods, ferrites, ceramics, glass, many plastics, stone, dry concrete etc.

Typical applications include: repairing cracks, dents, gouges and holes in industrial, automotive and household objects.

### **Technical Features**

Chemical type 1: Epoxy Resin

Appearance: Grey State: Putty

Working Time<sup>2</sup>: 4 - 7 minutes
Fixture Time<sup>3</sup>: 5 - 10 minutes

Full Cure @ 20°C 1 Hour

Cured Hardness 75 - 80 Shore D Shelf Life @  $20^{\circ}$ C 18 Months Tensile Shear<sup>4</sup>: 3.4 / 4.1 MPa Compressive Strength 83 MPa Electrical Resistance 30,000 M $\Omega$  Dielectric Strength 300 Volts / mil

Bisphenol A Epoxy Resin, number average MW <= 700

-50 to +120 °C

- Time before putty starts to cure, dependent on ambient temperature.
- 3 Time before joint is self-supporting, dependent on ambient temperature.
- 4 Lap shear on aluminium / Lap shear on mild steel

### **Surface Preparation**

Correct surface preparation is essential to a successful application.

Remove all paint, rust and grime from the surface by abrasive blasting or other mechanical techniques.

Roughen the surface to provide a "key" - this will give a stronger bond.

Clean the prepared area with methylated spirits or IPA to remove any oil, grease, dust or other foreign substances.

All prepared surfaces should be repaired as soon as possible to eliminate any oxidisation or surface contamination.

## **Mixing**

Simply twist or cut off the appropriate amount of putty required for the repair from the putty stick.

Wearing appropriate protective gloves. Knead the putty with your fingers until the colour is a uniform grey, this should take approximately one minute.

## **Application**

Apply the mixed KE020 epoxy putty to the surface to be repaired within 2 minutes of mixing.

The mixed epoxy does not show much bond strength at this time, and can be kneaded or formed into any cracks or holes which require filling.

When applying to a damp, wet surface or slow leaking area, work the material forcefully into the surface until the exothermic process begins and the adhesive bonds to the surface.

## Chemical / Solvent Resistance

KE020 is resistant to hydrocarbons, ketones, alcohols, esters, halocarbons, aqueous salt solutions and dilute acids and bases.

Temperature Range



# **KE020**

# Reinforced, Two Part Epoxy Putty

## **Storage**

KE020 epoxy putty should be stored in a cool, dry place when not used for a long period of time.

A shelf life of 18 months from date of manufacture can be expected when stored at room temperature (21°C) in the original container.

## **Product Safety**

For safe handling of this product consult the Safety Data Sheet before use. Wear Appropriate PPE as specified in section 8 of the Safety Data Sheet.

### General Information

KE020 epoxy putty is not intended for repairing or making good items that are used for storing food or drink.

KE020 is not suitable for bonding oven doors or car mirrors.

Do not use on polyolefin based substrates (e.g. polythene or polypropylene).

### Presentation

Co-extruded putty stick: ...... 50g

#### **Notes**

The data contained in this data sheet may be reported as typical value and/or range. Values are based on actual test data and are verified on a regular basis.

#### Disclaimer

Information presented herein has been compiled from sources considered to be accurate and reliable, but is not guaranteed to be so. Nothing herein shall be considered as recommending practices or products in violation of any patent, law or regulation. It is the user's responsibility to determine the suitability of any material for a specific purpose and to adopt such safety precautions as may be necessary.

WE MAKE NO WARRANTIES REGARDING THE PRODUCTS AND DISCLAIM ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.