



DATA SHEET

Fortafix High Temperature Adhesives

Minkon Fortafix U529NH

Description

Minkon Fortafix U529NH is a replacement for Brimor U529.

It has been reformulated and is now chromium free to comply with REACH legislation requiring the removal of 'Substances of Very High Concern' from the ingredient list. (<https://echa.europa.eu/candidate-list-table>)

It is a smooth white paste, has high bond strength, and produces a hard and tenacious cement when finally cured.

Temperature resistant to 1200°C - Fortafix U529NH is designed as a high temperature resisting strain gauge cement for use on Nimonic steels. It is also capable for use as a high temperature thread locking material in critical applications such as marine & industrial diesel engine assembly & maintenance. Fortafix U529NH can be utilised for other applications such as the assembly of high temperature electrical, mechanical and aerospace equipment.

Directions for Use

Preparation:

1.0 The area over which the cement is to be applied should first be roughened in order to provide adequate mechanical keying, and this is best produced by a light blasting using a non-metallic grit, preferably aluminium oxide. In the case of turbine blades and other highly stressed components it is usually necessary to mask those areas not requiring blasting.

2.0 The gauge location and any area on which leads are to be laid must then be washed thoroughly with acetone, several washes being given to make certain that the surface is absolutely clean and free from grease. Thereafter the surface should not be touched by hand.

Curing:

1.0 Pre-coat. When the cement has been applied it should be allowed to dry for approx. 30 minutes at room temperature, followed by a further 30 minutes during which gradual heating is applied to 70 - 80°C. (It is advantageous to use infra-red lamps for this purpose).

Note: The importance of allowing adequate time for the initial drying is emphasised.

When the cement has thoroughly dried out, transfer the components to an oven and bake for 30 minutes at 100°C, followed by 1 hour at 200°C and 250°C respectively.

2.0 First Overcoat: Same as pre-coat

3.0 Final Overcoat: Same as pre-coat, with the addition of a further bake at 350°C.

With regard to the baking cycle from 100°C upwards, the times of heating and temperatures are not critical, but the figures given should serve as a standard in order to maintain the most consistent results in practice. Final baking up to 500 - 600°C, particularly of components such as turbine blades, is considered to be beneficial since this improves the hardness of the cement and also stabilises the gauge.

Storage:

1.0 Before and during use the cements should be kept well stirred as the filler has a tendency to settle out after long storage.

2.0 To minimise the loss of the liquid fraction, the containers should be kept stoppered when not in use. In addition the screw caps and tops of the containers should be kept clean, since there is a tendency for a film of liquid to creep out between the threads of the container and cap.

3.0 The cements have a shelf life of several months if carefully used.

4.0 Some loss of the liquid fraction, which will normally occur with constant use, can be made good and the cement restored to its original consistency by the addition of a small quantity of distilled water. It is emphasised however, that this remedy should be used sparingly as over thinning will weaken the bond.

5.0 Brushes and stirrer rods should be washed in clean water.

Information for Supply

U529NH High Temperature Resisting Strain Gauge Cement – 100g Bottle

Hazard Statements

H315: Causes skin irritation.

H318: Causes serious eye damage.

Signal words

Danger

Hazard pictograms

GHS05: Corrosion



Precautionary Phrases

P102: Keep out of reach of children.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER/doctor.

In case of emergency contact (+44) 01429-273252

Storage

Product should be stored in original packaging between 5 - 30°C.

Shelf life -12 months from date of manufacture.