

# **BUILDING CHEMICALS SPECIALISTS**

## **Uni-Epoxy NS**

### **Non Sag Epoxy Resin System**

#### **Product Data**

**Uni-Epoxy NS** is an engineered, 100% solids, moisture-insensitive, long pot life, and non sag epoxy resin system. It is specially formulated and conveniently packaged for repair specialists, contractors and industrial users to assure simple application.

**Uni-Epoxy NS** meets the requirements of ASTM C-881-78 Type I, II and III, Grade 3, Class B and C. **Uni-Epoxy NS** contains no oil extenders or plastisizers.

#### **Basic Uses**

**Uni-Epoxy NS** is a high modulus, gel-consistency, non-sag bonding agent for vertical and overhead surfaces. Trowelled on a vertical surface.

**Uni-Epoxy NS** forms a permanent bond for products such as ceramic tile and decorative blocks. Spalls, wide cracks and voids can be easily filled with this trowel-grade material.

Applied neat, **Uni-Epoxy NS** should be used for grouting rebar, bolts, anchors and inserts in vertical surfaces, whenever the annular space is limited. Mixed with aggregate to form a high-strength mortar, **Uni-Epoxy NS** is an excellent vertical and overhead repair mortar for larger cracks, spalls, and areas needing resurfacing. For jobs requiring a non-sag, high strength epoxy, which may be trowelled, **Uni-Epoxy NS** is the product to use.

#### **Reasons for using Uni-Epoxy NS**

- Forms reliable glue line on sloped, vertical and overhead surfaces.
- Pre-measured Units – Allows sufficient time for mixing and application before setting. Especially helpful in hot weather.
- Moisture Insensitive. Bonds well to damp as well as dry surfaces. Cures to a waterproof state.

#### **Surface Preparation**

The surface must be clean, sound and free of dirt, oil, and rust, standing water, paint, laitance and any other contaminant that can interfere with bonding. The surface can be prepared by sandblasting, shotblasting,

scarifying, chipping or acid etching. If acid etching is used, all residual acid and salts must be removed from the surface by thorough rinsing with water.

The minimum acceptable bonding condition is a damp substrate surface dry, but all standing water must be removed.

The temperature of the substrate must be between 5°C and 38°C during placement. Lower temperatures prolong cure time and inhibit proper bonding. Temperatures above 38°C shorten pot life.

#### **Mixing**

Mix only the material that can be used within the pot life period. The pot life (gel time) is 75 minutes at 25°C. Warmer temperatures will shorten pot life and cooler temperatures extend pot life.

Prior to mixing, condition the grout components to a temperature range of 15°C to 27°C for optimum installation. Combine Component A, resin, and Component B, curing agent, and then mix thoroughly until a uniform, streak-free, grey mixture is obtained using a Jiffy® mixer or equivalent powered by a slow drill (450-600 revolutions per minute). The white epoxy resin and the black curing agent must be blended to a uniform grey without streaks or lumps.

After components are thoroughly mixed, aggregates may be added for grouting and patching application. Slowly pour the desired amount of dry aggregates into the mix under constant agitation and blend thoroughly. Up to two volumes of aggregates may be added for each volume of epoxy.

#### **Application**

For use as a bonding agent, apply epoxy to existing concrete or other construction surfaces with a brush, r or trowel. Recommended coverage is **1.7 l/m<sup>2</sup> for rough surfaces to 0.6 l/m<sup>2</sup> for smooth surfaces**. Pour the mixed concrete while the epoxy is tacky. If the epoxy has hardened before pouring it, mechanically scarify the hardened epoxy surface before recoating. Best bonding is achieved if the concrete has a slump of **50mm** or less. Concrete with a slump in excess of **100mm** should not be used.

For use as an epoxy mortar for patching and grouting, the thickness of the patch or topping should be **6mm to 25mm**. Deeper applications should be patched in layers. Allow each layer to cool before adding subsequent layers.

Uni-Epoxy NS may be towelled neat into shallow cracks and voids.

## Cleaning

Clean tools with Toluene or Xylene immediately after use. Exercise appropriate care when using these flammable solvents.

## Limitations

Do not thin **Uni-Epoxy NS** with solvents. This will prevent proper curing. Mix only with oven-dry aggregates to avoid moisture contamination. Substrate temperature must be between 5°C and 38°C during installation.

## Packaging

Each pre-measured unit which weighs 2.5Kg and is composed of 1.923 Kg of Epoxy Resin, Component A; and 0.577Kg curing agent, Component B.

## Shelf Life

All components 12 months when stored in unopened containers.

## Health & Safety

Avoid skin and eye contact. This product can cause severe skin irritation after prolonged or repeated exposure. If contact occurs, wash immediately with soap and water. If eye contact should occur, flush with plenty of water and seek medical attention. When handling, use disposable plastic or rubber gloves, wear protective clothing and discard clothing and gloves when finished. Never warm epoxy over direct heat.

## Warranty

Frinics products will perform according to specifications only if directions are followed. Frinics is not responsible for improper use, application, or storage of its products or for use of its products in unsafe weather or with unsafe engineering or working conditions.

**FRINICS CHEMICALS LTD**  
P.O. Box 12593, 2251 Latsia,  
12, 28<sup>th</sup> October Street. Dhali Industrial Area, 2540  
NICOSIA – CYPRUS  
**Tel:** +357 22480653, +357 99354598  
**Fax:** +357 22484729  
**Email:** [menikeas@frinics-chemicals.com.cy](mailto:menikeas@frinics-chemicals.com.cy)  
**Website:** <http://frinics-chemicals.com.cy>