Member of the Rigifoam (Pty) Ltd. Group
HQ 3 Detroit Street Apex, Benoni, RSA
Tel: +27(0) 11 974 9300 (NUI)
Tel: +27(0) 11 421 0313 (HQ)
www.urethanes.co.za
www.rigifoam.com

NUI-TDS

TECHNICAL DATA SHEET

ISSUE:	REVISED	REV No	DOCUMENT OWNER
14/02/2018	21/11/2019	2	National Urethane Industries K2020821246 Proprietary Limited T/A
TECHNICAL DATA:			**UltraPrime 800MT** MOISTURE TOLERANT PRIMER

PRODUCT DESCRIPTION

UltraPrime 800MT is a two-component, moisture insensitive epoxy-based primer for cementitious and steel substrates. **UltraPrime 800MT** is designed to have good penetrating properties on concrete substrates. It is suitable for a wide range of epoxy and polyurethane coatings and flooring systems. It can be applied by brush and roller onto concrete or cementitious substrates.

PRINCIPLE USES

Priming for new and old concrete substrates under normal conditions.

ADVANTAGES

- Low viscosity.
- Eliminates out-gassing of concrete.
- Compatible with a wide range of coatings and flooring systems.
- High penetration into concrete substrate.
- Coatings and floors can be applied the next day.

PERFORMANCE DATA

Pot Life (Minutes)	40 – 70 (25 ^{0}C)
Specific Gravity (g/l)	1.05
Touch Dry (Hours)	6 - 8 hrs
Over-coating Time (Hours)	6 - 24 hrs
Solids	100 %
Coverage (m²)	6 m² per litre (Depending on wastage and surface profile)

Note: The above results were obtained under laboratory conditions.

WATER VAPOUR EMISSION RATE TESTING

Prior to carrying out any work, the concrete substrate should be tested to determine the moisture vapour emission rate (MVER) according to test method ASTM F1869 or internal relative humidity (IRH) according to test method ASTM F2170.

For concrete slabs with an MVER of less than 3 lbs/1 000 ft^2 /24 hrs use **UltraPrime 800MT**. If the MVER is between 3 – 5 lbs /1000 ft^2 /24 hrs use **UltraPrime 800MT** one coat at 200µm wet film thickness. If the MVER is over 5 lbs/1 000 ft^2 /24 hrs use **UltraPrime 800MT** one coat at 200µm followed by one or two coats of **UltraPrime Moisture Barrier 580.**

SURFACE PREPARATION

Mechanical preparation of the substrate is important before priming with **UltraPrime 800MT**. The substrate should be structurally sound and free of oil, dust and debris, grease, paint, corrosion deposits, laitance, or other surface deposits. The surface should be prepared by captive blasting or as per standard practice to exposed aggregate surface. Any cracks or bug holes should be filled with **NUI-POX™ Grout 800** after application of **UltraPrime 800MT**. Consult with NUI technical sales staff for advice on substrate survey and preparation.

© Copyright 2013 in respect of this material is reserved in favor of National Urethane Industries (Pty) Ltd and the reproduction or editing thereof is strictly prohibited.

NEW CONCRETE FLOORS

A new concrete floor shall be at least 21 days old before priming with **UltraPrime 800MT**. The surface shall be prepared by light grit blasting, mechanical scabbling or grinding.

EXISTING CONCRETE FLOORS

For existing concrete floors, mechanical surface preparation as described above is highly recommended especially when they are contaminated with oil and grease or have an existing coating. To ensure good adhesion all contamination on the concrete substrate should be removed and the surface cleaned of all dust and any loose particles. Detergent wash and rinsing with water are also recommended for oil contaminated substrates.

POT LIFE AND CURING

UltraPrime 800MT has a 40 - 70 minutes pot life at an ambient temperature of 25 °C. The product can be applied at temperatures between 10 and 35 °C. Should the temperature increase, an accelerated reaction can be expected.

MIXING

Premix both base (Part A) and hardener (Part B). Add all of Part B to part A and mix using a drill (450 – 500 rpm) with an NUI approved mixing paddle for 2 - 3 minutes until both components have fully dispersed and a homogenous mix is obtained. Ensure to rotate the mixer inside the container. Only mix full packs.

APPLICATION

Apply in a single coat at the specified thickness using a heavy-duty squeegee to a cleaned and prepared surface. Scrub the product into the pores with a long handle scrub brush and back roll using a short hair roller to achieve a uniform finish.

On porous surfaces **UltraPrime 800MT** will be absorbed into the surface quickly leaving dry patches. It is recommended that these dry patches be recoated to ensure good adhesion and avoid substrate air release. Apply any topcoat within 6 to 24 hours after application. Any porous or absorbed areas still showing after priming applications, should be primed again.

When over-coating with a trowel finish resin screed: Immediately after application broadcast aggregate (0.95 mm) onto the surface at a ratio of 200 – 250 g/m^3.

When over-coating with a cementitious underlayment: Immediately after application broadcast with aggregate (1.3 mm) onto the surface until fully covered.

CLEANING

Clean hands and skin immediately after use with industrial hand cleaner. Clean tools and equipment immediately after use with **Ultrasolve 900-003.**

LIMITATIONS

- Working temperatures between 10 and 35 °C.
- **UltraPrime 800MT** will not accommodate movement cracks.
- Avoid excessive application.
- Avoid contact with skin.
- Do not release into sewer or surface water.

RIGIFoam (Pty) Ltd TM
SUPERIOR RIGID FOAM PRODUCTS

Directors: D.W. Goldsmith; M.J. Yacoby; D.M. Slade
K2020821246 (SOUTH AFRICA) PROPRIETARY LIMITED T/A NATIONAL URETHANE INDUSTRIES (REG NR 2020/821246/07)

© Copyright 2013 in respect of this material is reserved in favor of National Urethane Industries (Pty) Ltd and the reproduction or editing thereof is strictly prohibited.

PACKAGING

UltraPrime 800MT is supplied as a two-component 1 Litre, 5 Litre and 18 Litre kit.

STORAGE AND STABILITY

Both **UltraPrime 800MT** Part A and Part B have a shelf life of 12 months from date of delivery when stored in the original containers in a cool, dry place. Failure to do so will result in a reduction of shelf life.

SAFETY AND HANDLING

UltraPrime 800MT Part A contains epoxy resins. Use only with adequate ventilation. Avoid breathing of vapours and prolonged or repeated skin contact. Protective clothing and gloves should be worn when handling this product.

UltraPrime 800MT Part B contains amine compounds. Use only with adequate ventilation and avoid breathing of vapours and prolonged or repeated skin contact. Protective clothing should be worn and contact with the body avoided. All sources of ignition should be removed.

The safety procedures applicable to the handling of urethane raw materials should be read, understood, and rigidly adhered to. These are available on request from **NATIONAL URETHANE INDUSTRIES (Pty) Ltd.**

The information contained in this bulletin is to the best of our knowledge true and accurate but any recommendations or suggestions, which may be made, are without guarantee since the conditions of use are beyond our control. Furthermore, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing patents covering any material or its use.

In accordance with ISO 9001:2008 and the Occupational Health and Safety Act (Act 85 of 1993), herewith Product and Safety Data Sheet. We hereby confirm that we have received a Product and Safety Data Sheet for **UltraPrime 800MT PART A & B** and are returning the obsolete copies.	
COMPANY NAME:	
SIGNATURE:	
NAME:	
DATE:	
Product and Safety Data Sheet Reg. No:	

RIGIFoam (Pty) Ltd TM
SUPERIOR RIGID FOAM PRODUCTS

Directors: D.W. Goldsmith; M.J. Yacoby; D.M. Slade
K2020821246 (SOUTH AFRICA) PROPRIETARY LIMITED T/A NATIONAL URETHANE INDUSTRIES (REG NR 2020/821246/07)