

# GENERIC APPLICATION SPECIFICATION FOR THE APPLICATION OF ULTRASEAL BRUSH FOODGRADE & POTABLE WATER



## SUBSTRATE: CONCRETE – POTABLE WATER AND FOOD CONTACT

### 1.0 Weather Conditions:

No coating shall be done when relative humidity exceeds 70%. The surface temperature must be greater than 3° C above dew point. The ambient temperature must be greater than 5° C. Environmental conditions shall be checked every 2 hours or if the weather condition changes.

### 2.0 Pre-preparations:

- Visual inspection must be done on concrete surface to check for porosity, exposed aggregate, protrusions, cracks, physical damage or contaminants.
- Concrete surfaces must preferably be cured for a minimum of 28 days.

### 2.1 Pre-cleaning:

- Vacuum cleaning or air blast cleaning may be used to remove all loose dirt, dust and debris in accordance with ASTM D4258.
- If required, detergent water cleaning and steam cleaning may be used to remove oils and grease from the concrete.

### 3.0 Surface Preparation:

The preparation of concrete using certain mechanical methods:

- Hand or power tool cleaning
- Scarifying
- Abrasive cleaning
- Portable centrifugal blast cleaning
- High Pressure water cleaning

All existing coating and laitance must be removed.

### 3.1 Moisture Content:

Moisture levels must be preferably less than 7%.

Methods to use:

- Plastic sheet method (ASTM 4263)
- Moisture meter electrode (ASTM F2170-02)

### 4.0 Cleanliness of Surface Prior to Application:

- No significant visual dust.
- Newly abraded profile is cleaned to a dust and debris ISO 8502-3 max rating 2.

### 5.0 Application of NuCote MT/GP Primer Wet Concrete Primer:

Method of application:

- Brush
- Roller
- Squeegee (back rolled with a roller)

Typical dry film thickness: 150 –200 µm

Overcoating time:

- Minimum 6 hours / Maximum 24 hours at 25° C (depending on ambient conditions)

### 5.1 Application of UltraSeal Brush Foodgrade & Potable Water:

Method of application:

- Brush
- Roller

Mix ratio: 100:32.5 Pbm

Theoretical concentration/m<sup>2</sup>: ± 1.3 Kg at 1 mm (excl wastage)

Typical dry film thickness: 1.5 – 2 mm

Overcoating time:

- Min: 8 hours (Must be touch dry)
- Max: 16 hours @ 25° C

Pot life: 60 minutes at 25° C

### 6.0 Required Surface Preparation if Overcoating Time Has Expired:

- A circular sand motion is recommended with medium pressure to cross cut the Polyurethane coating and break the substrate gloss. Linear high speed sanding may leave the parent coating polished.
- Solvent wipe abraded area using Ultrasolve 900-003 (MEK) making sure the newly abraded profile is cleaned to a dust and debris ISO 8502-3 max rating 2.
- Wait for solvent, MEK to flash off. This will take ± 15 minutes at 25° C at 50% relative humidity.
- Brush apply 20 µm of Bakkie Bond 520-003 and leave until "tacky". This will take ± 2 hours at 50% RH and 25° C.
- Brush apply over Bakkie Bond 520-003 using UltraSeal Brush Foodgrade & Potable Water.

### 7.0 Inspection and Test Reports:

- Daily reports for humidity, temperature, dew point shall be recorded.
- Dust and debris reports.
- Dry film thickness measurements (SSPC – PA9) Ultrasonic gauge.
- Moisture content reports.

# GENERIC APPLICATION SPECIFICATION FOR THE APPLICATION ULTRASEAL BRUSH FOODGRADE & POTABLE WATER (continued)



## 8.0 Technical Data Sheets and Material Safety Data Sheets:

The following Technical Data Sheets and Material Safety Data Sheets are provided with the specification:

- Ultrasolve 900-003 (MEK)
- NuCote MT/GP Primer
- UltraSeal Brush Foodgrade & Potable Water
- Bakkie Bond 520-003

*Manufactured by NUI – Member of the RIGIFoam Group*

[www.ultraseal.co.za](http://www.ultraseal.co.za)  
[www.rigifoam.co.za](http://www.rigifoam.co.za)  
+27 (0)11 421 0313



DISAVOWAL: The customer acknowledges and understands that after delivery, the goods will have left the control of Rigifoam (Pty) Ltd, and that the customer will be responsible for the unpacking of and connection/installation of the goods. The customer acknowledges that it is his/her further responsibility to ensure that a fully qualified and competent person is used to install the goods to ensure their effective operation. Failure by the customer to ensure the installation of the goods, according to the written instructions of the manufacturer and/or supplier, by a fully qualified and competent person, may result in the failure of the goods, injury, loss or damages to the customer. Accordingly, and in this event, Rigifoam (Pty) Ltd accepts no responsibility for any loss or damages that might arise by reason of death or personal injury to any person engaged in the installation or use of the goods thereafter, subject to the provisions of the Consumer Protection Act 68 of 2008.