







For Internal Floor & Wall, Swimming Pool



Crack-free



Stain-free & Chemical Resistant.



Waterproof



Available in different Colours



Low VOC



Available in 1 kg, 5 kg & 20 kg packs.



# RAINBOW TILE MATE EPOXY (RTM EPOXY)

#### **DESCRIPTION**

Roff Rainbow Tile Mate Epoxy (RTM Epoxy) is a stainless, chemical resistant, hard wearing & impervious epoxybased tile joint filler which has high degree of resistance to abrasion, impact & shocks. It is designed for grouting gap

between glazed, ceramic, porcelain, vitrified & fully vitrified tiles, natural stones & Glass mosaics. Roff RTM Epoxy can also be used as a high-performance epoxy adhesive for fixing tiles & stone.

#### **AREA OF USE**

Surface to be grouted	Area of application				
All types of ceramic tile, glazed tiles, porcelain tiles, vitrified & fully vitrified tiles, natural stones*, large format tiles, glass mosaic tiles, composites & engineered stone.	Floor & walls of internal & external area*, dry as well as wet area, water submerged area, food, pharma & hygiene required areas, area containing aggressive chemicals*, heavy traffic/ movement areas, domestic applications, commercial applications, wider tile joints				

#### \*Note:

- 1. For highly absorbent natural stones/ marbles which may form a wet or colored patch when tile grout is applied, do sample test to check for possible staining. It is recommended to use suitable Roff Impregnating sealer on all sides & mask the tiles before grouting.
- 2. For external application, please contact Roff personnel for technical assistance.
- 3. See chemical resistance table for chemical areas.

#### **FEATURES AND ADVANTAGES**

- Stainless Will not be stained by most foods, beverages and cleaning agents
- Easy Maintenance Smooth texture, easier to clean.
- Provides excellent chemical resistant to many acids, alkalis and corrosives.
- Provides hygienic, hard wearing and abrasion resistant surface.
- Waterproof property
- Durable Will not peel, crack or powdering
- Excellent mechanical property & highly resistant to heavy traffic.
- Easy to Use No noxious odor, nonflammable, water cleanable, easy to clean.
- Stable and uniform coloring for all types of tiles.

#### **LIMITATIONS**

- For highly absorbent natural stones/ marbles which may form a wet or colored patch when tile grout is applied, do sample test to check for possible staining.
   It is recommended to use suitable Roff Impregnating sealer on all sides & mask the tiles before grouting.
- In case of the resin absorption, the dark stains may form on the sides and on the surface of the slabs and they can't be removed. This problem is usual for marbles/ stone of light colors.
- Consult Roff Technical Services for recommendations on exterior applications. Light colors may darken slightly & turns to yellowish due to direct UV exposure.



# RAINBOW TILE MATE EPOXY (RTM EPOXY)

#### **TECHNICAL INFORMATION**

APPLICATION PROPERTIES (Base + Hardener + Filler)

Testing Properties	Test Results				
Component Appearance	Base (Part A) – White Viscous liquid Hardener (Part B) – Yellow Viscous liquid Filler (Part C) – Colored powder				
Mixing Ratio	184 (Base) + 78 (Hardener) + 738 (Filler)				
Mixed Material Consistency	Smooth creamy paste				
Mixed Density	1.75 ± 0.05 kg/ litre				
Pot life @ 30°C	Min. 60 minutes				
Joint Width	2 – 15 mm				
Sag Resistant	No-sag				
Application Temperature	From +10°C to +35°C				
Temperature of Use	From -20°C to + 100°C				
Light Foot Traffic	24 hours				
Regular Traffic	3 days				
Available Shades	27 shades				
PERFORMANCE PROPERTIES					
Compressive Strength after 7 days	> 50 MPa				
Flexural Strength after 7 days	> 30 MPa				
Shear Adhesion Strength after 14 Days	≥ 30 KN				
Water Absorption	≤ 0.5 g				
Pull-off Adhesion Strength	≥ 1.5 Mpa (Concrete failure)				
Total VOC Content (EPA 24 method)	< 8 gm/ kg				

Note: Test results are indicative as per testing method specified in standard. Test results may vary as per substrate, site condition & testing machine etc. Actual field performance will depend on installation methods and site conditions.

## **CHEMICAL RESISTANCE**

#### PROLONGED CONTACT

Aluminum Bromide, Aluminum Flouride, Baking Soda, Barium Hydroxide, Beer, Boric Acid, n-Butanol, Calcium Chloride, Carbonates, Carbonic Acid, Castor Oil, Chlorides, Chlorinated Paraffin, Citric Acid, Coconut Oil, Cotton Seed Oil, Diesel, Dilute Detergents, Ethanol, Ethylene Glycol, Fats, Ferric Chloride, Fish Oil, Gasoline, Groundnut Oil, Kerosene, Linseed Oil, lubricating Oils, Milk, Nitrates, Olive Oil, Palm Kernel Oil, Palm Oil, Paraffin Wax, Pine Oil, Potassium Hydroxide, Silicates, Sodium Carbonate, Sodium Chloride, Soybean Oil, Sugar, Sulphates, Sunflower Oil, Tannic Acid, Vegetable Oil, Water & White Sprit.

#### MAX. 24 HRS

Acetic Acid (5%), Ammonium Bromide (5%), Household Ammonia, Hydrochloric Acid (dil), Lactic Acid (3%), Methanol, Phosphoric Acid (10%), Sodium Hydroxide.

#### SPLASH CONTACT

Acetic Acid (10%), Acetone, Acetyl Bromide, Benzene, Carbon disulphide, Carbon Tetrachloride, Chloroform, Chromic Acid, Ethyl Alcohol, Formic Acid, Lime Juice, Nitric Acid (10%), Phenol, Sulphuric Acid (20%), Methylene Chloride, Methylene Formamide.

Please consult with Roff Technical Services.



# RAINBOW TILE MATE EPOXY (RTM EPOXY)

#### **APPLICATION INSTRUCTIONS**



#### SUBSTRATE PREPARATION

- Ensure 24 hours time interval for grouting after tile fixing.
- The joints must be dry, clean, free of dust & adhesive.
- Emptied at least 2/3 of the tile thickness depth.
- Before grouting, make sure that the installation the adhesive has set and released most of its moisture.

  The joints should not be wet during work.
- Put masking tape by side of grouting space or sealer if necessary.

#### MIXING

- Shake the bottle of Hardener and stir the Base prior to mixing.
- Pour Part A (Base) & Part B (Hardener) into a clean mixing pail.
- Mix thoroughly by hand or with a slow speed mixer (<300 RPM) until liquids are completely blended.</li>
- Add Part C Filler Powder and mix until a uniform color & consistency.
- Avoid entraining air by mixing at very high speed or by over-mixing.
- Use the paste within 45 60 minutes from mixing.

#### **APPLICATION**













- Using a hard rubber squeeze/ grout floater, press the grout firmly into the joints.
- Hold the float at a 90° angle and pull it at a 45° angle diagonally across the joints and tile to avoid pulling out the material.
- Work in small areas to have better control on removing the excess grout from joints and surface by moving the squeeze diagonally to the grout lines.
- Ensure that joint is filled completely, and grout is not just sitting on top.

#### **CLEANING & FINISHING**

- Clean off the surplus grout from tile joints and tiles within 30-45 minutes/ before the product dries.
- Initially use a rough textured sponge dampened with water to remove the grout residue.
- Use the damp sponge in a circular motion and keep it relative to the tile surface to achieve the flush joint & taking care not to drag grout from the joints.
- Clean off any light residue of tile grout left on the tile surface using an alkaline detergent/ Roff tile cleaner without disturbing the joint finish.
- Tools and containers should be cleaned using clean water when the grout is still fresh.

## APPLICATION: TILING

Spread mixed material over the surface using a notch trowel. Tiles should be placed within the open time of the material. Due to the slip resistance properties of the material, tiles can be fixed vertically. Press firmly the tiles to ensure a good adhesion and remove surplus material from the face of the tiles immediately

#### **PRECAUTIONS & NOTE**

- Please take right/ complete proportion of all components (base, hardener & filler). Any change in proportion would not give correct product performance.
- Do not apply on wet/damp tile joints. Always apply on completely dry tile joints.
- Do not over-mix the material. Over-mixing can reduce the pot life.
- Apply masking tapes along tile joints while working on unglazed floor tiles, porous tiles & natural stones, tiles with matt glaze or textured surfaces.
- While cleaning, change water frequently. Change cleaning cloth/ sponge when they are impregnated with grout.
- Protect from direct rainfall/foot traffic for at least 24 hours.
- Do not use acid to clean joints. Use Roff Cera clean for cleaning purpose.
- Do not allow grout to harden on the face of the tile. Clean promptly.



# **RAINBOW TILE MATE EPOXY (RTM EPOXY)**

#### **COVERAGE**

CONSUMPTION TABLE DEPENDENT ON THE SIZE OF THE TILES AND WIDTH OF THE JOINTS (kg/m²)

Tile Dimension (mm)			Joint/ grouting Width (mm)							
Length	Width	Thickness	2	3	4	5	6	8	10	12
25	25	6	1.68	2.52	3.36	4.20	5.04	6.72	8.40	10.1
25	50	6	1.26	1.89	2.52	3.15	3.78	5.04	6.30	7.56
50	50	6	0.84	1.26	1.68	2.10	2.52	3.36	4.20	5.04
100	100	6	0.42	0.63	0.84	1.05	1.26	1.68	2.10	2.52
100	100	10	0.70	1.05	1.40	1.75	2.10	2.80	3.50	4.2
300	200	6	0.18	0.26	0.35	0.44	0.53	0.70	0.88	1.05
300	300	6	0.14	0.21	0.28	0.35	0.42	0.56	0.70	0.84
450	300	6	0.12	0.18	0.23	0.29	0.35	0.47	0.58	0.7
600	300	6	0.11	0.16	0.21	0.26	0.32	0.42	0.53	0.63
600	600	8	0.09	0.14	0.19	0.23	0.28	0.37	0.47	0.56
800	800	8	0.07	0.11	0.14	0.18	0.21	0.28	0.35	0.42
1000	1000	10	0.07	0.11	0.14	0.18	0.21	0.28	0.35	0.42
1200	600	10	0.09	0.13	0.18	0.22	0.26	0.35	0.44	0.52
1200	800	10	0.07	0.11	0.15	0.18	0.22	0.29	0.36	0.44
1200	1200	12	0.07	0.11	0.14	0.18	0.21	0.28	0.35	0.42
1600	800	12	0.08	0.12	0.16	0.20	0.24	0.32	0.39	0.47
1800	1200	12	0.06	0.09	0.12	0.15	0.18	0.23	0.29	0.35

The coverage mentioned in table is indicative only and can vary as per the tile size, thickness, joint width & wastage during application.

#### FORMULA FOR THE COVERAGE CALCULATION

# $C = 1.75 \times H \times T \times [(L + W) / (L \times W)]$

C - Tile grout coverage (kg/m²)

H - Thickness of tile (mm)

T - Width of joint (mm)

L - Length of tile (mm)

W - Width of tile (mm)

## **PACKAGING**

1 kg, 5 kg & 20 kg packs

#### SHELF LIFE

24 months for sealed pack when stored under cover, out of direct sunlight, dampproof condition and protect from extremes of temperature (store between +15°C to +35°C temperature).

### **SAFETY PRECAUTIONS**

Keep out of reach of children. Wear suitable protective clothing, gloves and eyes/face protection. After contact with skin, wash immediately with plenty of clean water. In case of contact with eyes rinse immediately with plenty of clean water and seek medical advice. Limited to professional use only.

For more details please refer the relevant Material Safety Data Sheet, available on request.



# Pidilite Industries Limited

Construction Chemicals Division, Ramkrishna Mandir Road, Post Box No. 17411, Andheri (E) Mumbai 400059 INDIA

Tel +91-22-2835 7000 Fax +91-22-2835 7008 · Website: www.roff.in · E-mail: roff@pidilite.co.in · Toll Free No. 1800 22 5502  $\textbf{DISCLAIMER}: \textbf{While the company guarantees its products against defective materials, the use and application of these products are made without guarantee since the conditions of the second or t$ their application are beyond its control. It is recommended to verify with the company that the product is suitable for the intended use, and that this Data Sheet version is the latest

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