

## TECHNICAL DATA SHEET



### RITEPOXY<sup>®</sup> ESG 1200

Three Component Epoxy Grout

(Ref. MBPL / TDS / ESG 1200 / 0524)

### ❖ Product Description

**RITEPOXY<sup>®</sup> ESG 1200** (Epoxy Stain-free Grout) is three component epoxy grout, designed specially for use in filling up joints of ceramic tiles, vitrified tiles and joints, where hygiene is of utmost importance such as bathrooms, kitchens, living room, bedroom, hospitals, laboratories, swimming pools, showrooms, airports and high traffic areas. **RITEPOXY<sup>®</sup> ESG 1200** is easy to apply and recommended for internal & external floors and wall applications. It is chemical resistant joint filler and is available in more than 28 shades.

### ❖ Special Features

- Food Grade : **CFTRI Approved**; Conforms to the specifications as per **USFDA 175.300**.
- Three component, Stainfree, Epoxy Grout.
- **EN 13888 / ISO 13007-3** : Classified as RG.
- Confirms **ANSI 118.3** requirements.
- Colour-fast & 100% Stain free.
- High Abrasion Resistance.
- Chemical Resistant & Non Toxic.
- Anti-bacterial & Anti-Fungal.
- Strong, Durable & Easy to Clean.
- Ideal for Waterproof Grouting.
- Highly resistant to Heavy Traffic.



## ❖ Applications

- All internal & external floor & wall applications
- Washrooms and cleaning rooms
- Swimming Pools
- Laboratories
- Schools
- Hospitals and operation theatres
- Lounges / Restaurants / Cafeterias
- Shopping Malls
- Showrooms
- Covered exterior applications

## ❖ Advantages

- Colour fast and 100% stain free
- Chemical resistant with non-toxic properties
- Anti-bacterial and Anti-fungal
- Strong, durable and easy to clean
- Ideal for waterproof grouting
- High abrasion and impact resistance
- Available in more than 28 shades

## ❖ Suitable Substrates

- Porous and absorbent type tiles
- Ceramic and vitrified tiles
- Non-vitreous clay tiles
- Granite, marble & glazed wall tiles.
- Agglomerates (Engineered Stone)
- Glass mosaic tiles

## ❖ Coverage

- Varies with width and depth of joint (Refer grout consumption formula)

## ❖ Grout Consumption Formula

$$\frac{(\text{Tile length} + \text{Tile breadth}) \times \text{Tile thickness} \times \text{Joint width} \times \text{Specific gravity}}{(\text{Tile length} \times \text{Tile breadth})} = \text{kg} / \text{m}^2$$

Note : Specific Gravity - 1.73 gm/ml

## ❖ Packing

- Available in **1 Kg & 5 Kg**
- Bigger size project pack available on demand

Particulars	1 Kg Pack	5 Kg Pack
Part A - Hardener	70 gm	350 gm
Part B - Resin	180 gm	900 gm
Part C - Filler Powder	750 gm	3.75 Kg

## ❖ Shelf Life

- Factory sealed packs are best before 24 months from the date of manufacturing in unopened condition and stored in cool & dry area

## ❖ How to Apply

### Surface Preparation

- Clean application area & remove dirt, dust & excess adhesive from tile joints.
- Clean the wall or floor before application of tile grout. Ensure the adhesive used for tile installation is fully cured
- Remove water from the joints. It should be in dry condition
- Ensure the substrate temperature is between 15 °C to 35 °C
- Before grouting, do a sample test if the tile or stone surface is highly porous or rough surface which may make cleaning difficult

### Mixing

- Take Part A & Part B in a cleaned bucket and mix thoroughly for 1- 2 minutes
- Add approx. 75% quantity of Part-C (Filler Powder) slowly in to the liquid mix and continue the mixing
- Add remaining quantity of Part-C (Filler Powder) and mix it to make a homogenous mixture
- Adjust the filler powder quantity addition till get the desired consistency of paste to fill in to the joints

### Application

- Spread the mixed material on application surface area using rubber float or appropriate trowel to fill-up the tile joints
- Press the material firmly into the joints diagonally to the tile surface
- Make sure the joints are completely filled
- Remove excess grout immediately using the spreader or float. Use rubber float at 90° angle and pull it diagonally to the joints and tile surface
- Ensure flush joints are achieved while removing excess grout from the surface
- Wait for 30 - 45 minutes for joints to harden

### Cleaning

- Begin initial clean up with fresh and clean water & gently use damp scrub pad in circular motion to remove excess materials, epoxy haze film from the tile/stone surfaces
- Use plenty of clean water until excess grout, haze is cleared from surface
- Rinse the scrub pad frequently and squeeze it in a water bowl. If necessary, replace the scrub pad if it is saturated with excess grout
- Change the water frequently
- Ensure grout material should not be removed from packed joints
- After finishing the initial cleaning with water, drag the surface with a clean wet towel at 45 degree to the grout joints to remove excess waters and grout debris
- Dress the joint or grout surface with a sponge or use hand glove finger with water to get smooth joint finish
- Wait for 24 hours and finally clean the surface with soap or shampoo water to remove the epoxy marks
- Surface is now ready to use

### ❖ Notes on Application / Limitations

- For grouting surface should be good condition
- Always add filler powder to mixed resin & hardener
- Do not add excess filler powder to mixed resin & hardener
- Do not use on joints less than 2 mm and more than 12 mm width
- Care should be taken to avoid staining tiles when grouting application
- Dark stains may form on the sides of the surface of especially light-coloured marbles or stones
- Protect area of application until fully cured (24 hours)
- Make preliminary sample test before grouting porous tiles or stone or rough surface. Apply masking tapes along with joints on rough surfaces
- Light may colours darken or turns to yellowish when direct exposure to UV light
- For external applications usage, please consult MYMIX technical representative for the assistance
- Tools and containers should be cleaned using clean water when the grout is still fresh



## ❖ Technical Data

### Application Properties

(Temperature : 23 - 27°C & Relative Humidity : 55%)

Testing Parameters	Typical Result	Testing Parameters	Typical Result
Colours	Available in >28 shades	Density of Mixture	1.70 -1.80 gm/ml
Joint Width	2 to 12 mm	Time to Foot Traffic	24 hours
Pot Life	50 minutes	Time to Heavy Traffic	72 hours
Initial Water Cleaning	30 - 45 minutes	Temperature Resistance	-10 <sup>0</sup> to 80 °C

### Technical Performance data according to ANSI 118.3

Test Parameter	Test Method	Typical Results
Water Cleanability @ 80 minutes	ANSI 118.3 (Section 5.1)	PASS ( 95 -110 minutes )
Initial Setting Time	ANSI 118.3 (Section 5.2)	240 minutes
Shrinkage after 7 days	ANSI 118.3 (Section 5.3)	< 0.12 %
Sag in Vertical Joints	ANSI 118.3 (Section 5.4)	No Sag
Compressive Strength after 7 days	ANSI 118.3 (Section 5.6)	>8000 psi
Tensile Strength after 7 days	ANSI 118.3 (Section 5.7)	1800 - 2350 psi

### Technical Performance Data according to ISO 13007 / EN 13888 (Classification : RG)

Test Parameter	Test Method	Typical Results
Abrasion Resistance	EN 12808 - 2	< 200 mm <sup>3</sup>
Flexural Strength	EN 12808 - 3	> 32 Mpa
Compressive Strength	EN 12808 - 3	> 55 Mpa
Shrinkage	EN 12808 - 4	0.7 - 0.85 mm/m
Water Absorption after 240 Minutes	EN 12808 - 5	0.010 - 0.020 g
Chemical Resistance	EN 12808 - 1	Refer chemical resistance table

**Note :** 1 Mpa is equivalent to 145 psi

## ❖ Chemical Resistant Chart

Chemical Name	Typical Results @ 25 °C		
	Prolonged Contact	Moderate Contact <small>(Max. 24 hrs)</small>	Splash Contact
Ethanol	NR	R	R
Potassium Permanganate (10%)	NR	R	R
Potassium Permanganate (1%)	R	R	R
Tartaric Acid (50%)	R	R	R
Citric Acid (20 %)	R	R	R
Phosphoric Acid (10%)	R	R	R
Hydro Chloric Acid (10%)	R	R	R
Sulfuric Acid (20%)	NR	R	R
Oxalic Acid (10%)	R	R	R
Lactic Acid (5%)	NR	R	R
Acetic Acid (5%)	R	R	R
Sodium Hydroxide (50%)	R	R	R
Benzoic Acid (5%)	R	R	R
Hypochlorite Solution (4%)	NR	NR	R
Hydrogen Peroxide (4%)	R	R	R
Methanol	NR	NR	R

Chemical Name	Typical Results @ 25 °C		
	Prolonged Contact	Moderate Contact <small>(Max. 24 hrs)</small>	Splash Contact
MEK	NR	NR	R
Acetone	NR	NR	R
Chloroform	NR	NR	NR
Methylene Chloride	NR	NR	NR
Toluene	NR	NR	R
Xylene	NR	NR	R
Diesel	R	R	R
Petrol	R	R	R
Pine Oil	R	R	R
Butyl Acetate	NR	NR	R
Vegetable Oil	R	R	R
Water	R	R	R
Milk	R	R	R
Wine	R	R	R
Sea Water	R	R	R
Fruit Juice	R	R	R

Note : R - Recommended & NR - Not Recommended.

## ❖ Standards Followed

- ISO 13007-3 / EN 13888 : Classification RG
- ANSI 118.3-2012

## ❖ Precautions

- Keep out of reach of children
- Wear suitable protective cloths, respirator and gloves
- In case of contact with skin / eyes, wash immediately with plenty of water & seek medical help

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