



## PRODUCT DATA SHEET

# weberepox easy

Two-component, high productivity, easy-to-apply, reaction resin base tile adhesive and grout. In compliance with BS EN 12004 class R2T and BS EN 13888 class RG

### PRODUCT

**weberepox easy** is a two-component, easy-to-use, 100% solid content, epoxy-based tile adhesive and grout. It is suitable for all types of tiles and stones on the floor and wall. It is especially recommended for hygiene-sensitive areas and areas which require sterile conditions. When components of **weberepox easy** are mixed, it forms a smooth, creamy & thixotropic paste, which makes it easy to mix, apply, clean, and maintain. At the same time, it also provides high mechanical and chemical resistance properties. **weberepox easy** is available in an attractive range of colours

#### Uses

- Grouting tiles where chemical resistance or complete impermeability is required
- High bond strength properties suitable for use with ceramic tile, porcelain, and vitrified tiles, large format tiles & stones, low thickness slabs, natural stone, artificial stone, etc.
- Fixing tiles where very high bond strength, toughness and flexibility are required
- Resistance to bacteria & fungal growth, suitable for hospitals, operation theatres, clinics, swimming pools and kitchens

#### Features and Benefits

- Highly thixotropic (non-sagging) and easy to apply
- Extra flexible
- High mechanical strengths
- High resistance to abrasion and water
- Long-lasting protection from mould growth and effective against microbial activity
- Chemical and stain resistant
- Low VOC

### TECHNICAL DATA

Colour	Refer to the standard colour chart
Component	Component A - Coloured resin paste Component B - Neutral colour hardener paste
Density	1.58 g/cm <sup>3</sup>
Pot life	~ 80 mins (25 °C)
Full cure	7 days
Temperature range (resist)	0 – 80 °C (Fully cured)

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## **PHYSICAL PROPERTIES**

### **Confirmation to standards ISO 13007 – 3 & BS EN 13888 – 1 class RG – reaction resin grout**

<b>Test characteristics</b>	<b>Test methods</b>	<b>Results</b>
Abrasion resistance	ISO 13007 – 4 BS EN 12808 – 2	210 mm <sup>3</sup> 165 mm <sup>3</sup>
Flexural strength	ISO 13007 – 4 BS EN 12808 – 3	42.2 N/mm <sup>2</sup> 30.6 N/mm <sup>2</sup>
Compressive strength	ISO 13007 – 4 BS EN 12808 – 3	49.5 N/mm <sup>2</sup> 50.4 N/mm <sup>2</sup>
Shrinkage for tile grout	ISO 13007 – 4 BS EN 12808 – 4	0.19 mm/m 1.178 mm/m
Water absorption after 30 minutes (@ 28 days)	BS EN 12808 – 5	0.0 g
Water absorption after 240 minutes (@ 28 days)	ISO 13007 – 4 BS EN 12808 – 5	0.006 g 0.0 g

### **Confirmation to standard BS EN 12004 – 1 class R2T – reaction resin adhesive**

<b>Test characteristics</b>	<b>Test methods</b>	<b>Results</b>
Initial shear adhesion strength	BS EN 12003 Clause 7.3	13.0 N/mm <sup>2</sup>
Shear adhesion strength after water immersion	BS EN 12003 Clause 7.4	14.1 N/mm <sup>2</sup>
Shear adhesion strength after thermal shock	BS EN 12003 Clause 7.5	11.8 N/mm <sup>2</sup>
Open time (20 minutes): tensile adhesion strength	BS EN 1346	2.4 N/mm <sup>2</sup>
Slip resistance test	BS EN 1308	0.2 mm

### **ANSI 118.3 specification**

<b>Test characteristics</b>	<b>Test methods</b>	<b>Results</b>
Water cleanability	ANSI 118.3 Clause 5.1	120 mins
Setting time a) initial b) Service time	ANSI 118.3 Clause 5.2	173 mins 6 days
Linear shrinkage	ANSI 118.3 Clause 5.3	0.022 %
Sag in vertical joints	ANSI 118.3 Clause 5.4	No sag observed
Tensile strength	ANSI 118.3 Clause 5.7	10.6 N/mm <sup>2</sup>
Thermal shock	ANSI 118.3 Clause 5.8	7.0 N/mm <sup>2</sup>

### **Other properties**

<b>Test Items</b>	<b>Testing Methods/Standards</b>	<b>Results</b>
VOC content	USEPA Method 24 ASTM D2369	26 g/L
Antimicrobial activity	JIS Z2801	> 99.99 % (E. coli) > 99.99 % (S. aureus)

Unless specified, all technical data are average values and refer to a 28-day curing time.

The above physical data are taken from laboratory tests. In situ material performance may vary according to environmental & workmanship conditions beyond the manufacturer's control.

### Compiled Standards

European Norm	: BS EN 12004, BS EN 13888
International Organization for Standardization	: ISO 13007
American Standards	: ANSI 118.3, ASTM D2369
Japan Industrial Standard	: JIS Z2801

### Thickness and Theoretical Consumption (Adhesive consumption in kg/m<sup>2</sup>)

Tile size (mm x mm x mm)	Recommend notch size (mm x mm)	Back buttering thickness (mm)	Total thickness (mm)	<b>weberepox easy</b> consumption (kg/m <sup>2</sup> )
45 x 95 x 6	6	Nil	2	<b>3.15</b>
45 x 145 x 6	6	Nil	2	<b>3.15</b>
100 x 100 x 7	6	Nil	2	<b>3.15</b>
200 x 200 x 7	6	Nil	2	<b>3.15</b>
300 x 300 x 10	6	1	3	<b>6.3</b>
300 x 600 x 10	6 - 8	1	4	<b>6.3</b>
600 x 600 x 15	8 – 10	2	5	<b>7.9</b>

### Thickness and Theoretical Consumption (Grout consumption in kg/m<sup>2</sup>)

Tile size (mm x mm x mm)	Joint width in mm					
	2	4	6	8	10	12
300 x 300 x 8	<b>0.16</b>	<b>0.32</b>	<b>0.48</b>	<b>0.64</b>	<b>0.80</b>	<b>0.96</b>
300 x 300 x 10	<b>0.20</b>	<b>0.39</b>	<b>0.59</b>	<b>0.79</b>	<b>0.99</b>	<b>1.18</b>
300 x 300 x 12	<b>0.23</b>	<b>0.47</b>	<b>0.70</b>	<b>0.93</b>	<b>1.17</b>	<b>1.40</b>
300 x 450 x 8	<b>0.13</b>	<b>0.27</b>	<b>0.40</b>	<b>0.54</b>	<b>0.67</b>	<b>0.81</b>
300 x 450 x 10	<b>0.17</b>	<b>0.33</b>	<b>0.50</b>	<b>0.66</b>	<b>0.83</b>	<b>1.00</b>
300 x 450 x 12	<b>0.20</b>	<b>0.39</b>	<b>0.59</b>	<b>0.79</b>	<b>0.99</b>	<b>1.18</b>
450 x 450 x 8	<b>0.11</b>	<b>0.22</b>	<b>0.33</b>	<b>0.43</b>	<b>0.54</b>	<b>0.65</b>
450 x 450 x 10	<b>0.13</b>	<b>0.27</b>	<b>0.40</b>	<b>0.54</b>	<b>0.67</b>	<b>0.81</b>
450 x 450 x 12	<b>0.16</b>	<b>0.32</b>	<b>0.48</b>	<b>0.64</b>	<b>0.80</b>	<b>0.96</b>
450 x 600 x 8	<b>0.10</b>	<b>0.19</b>	<b>0.29</b>	<b>0.38</b>	<b>0.48</b>	<b>0.57</b>
450 x 600 x 10	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>
450 x 600 x 12	<b>0.14</b>	<b>0.14</b>	<b>0.14</b>	<b>0.14</b>	<b>0.14</b>	<b>0.14</b>
600 x 600 x 8	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>
600 x 600 x 10	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>
600 x 600 x 12	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>

## FORMULA FOR THE CONSUMPTION AND COVERAGE OF TILE GROUT

$$\left( \frac{L + W_T}{(L + t) \times (W_T + t)} \times t \times W_j \times 1.58 \right) \text{ kg/m}^2$$

Where         $L$         : Length of tile (mm)  
                  $W_T$       : Width of tile (mm)  
                  $t$          : Thickness of tile (mm)  
                  $W_j$       : Width of joints (mm)

## PROCEDURE

### **Substrate Preparations**

Substrate must be free from grease, mould oil, rust, rusty metal, wood peels, paints, plastics, loose particles, contamination on any traces of foreign materials affecting the adhesion of **weberepox easy**.

All joints should be cleaned by washing with water/detergent. Any water or moisture present during grouting can cause the breakdown of the epoxy and make it susceptible to absorbency and discolouration. Ensure the joints are completely dry before grouting.

### **Mixing**

Take 4 parts Resin (**component A**), 1 part Hardener (**component B**), 4:1 by weight and in case of volume ratio of 3.75 : 1. Mix the components thoroughly for 2 – 3 minutes or until a homogeneous paste and consistent colour is formed.

A mechanical mixer with a slow 100 rpm is highly recommended. Avoid prolonged mixing as it traps air and shortens the pot life.

The normal workable mixture can be up to 80 minutes at 25°C.

Wash tools immediately with water before the epoxy hardens.

No water to be added to the mix.

### **For Tile Grouting**

Apply **weberepox easy** grouting mortar to the tiled wall with a rubber, sponge trowel, or other suitable tool diagonally over the tiles. Force and compact the grout deep into the joints continuously, leaving it flush with the tile edge, ensuring the joints are firmly filled and free of voids.

Wipe off any excess material immediately with a sponge or an appropriate tool within 30 – 90 minutes. Use a damp sponge to clean the tiled surface in a circular motion to get optimum results.

It should be ensured that the minimum amount of water is required for cleaning, which otherwise impairs the final chemical resistance.

For vertical surfaces, a non-abrasive cloth or smooth pad can be used to loosen any film and remove it without removing the epoxy from the joints.

It is recommended that for surfaces, the final cleaning and touch-ups should be done within 30 minutes of the application.

## **For Tile Adhesive**

Apply **weberepox easy** by using a notched trowel directly onto the substrate. Press tile/stone firmly against the adhesive bed with slight shear. Ensure proper material transfer for good bonding.

Please refer to our method statement for procedures in detail.

## **Curing**

Natural air curing is enough for **weberepox easy**.

Keep the working area protected for 24 hours after application. For swimming pools, it is required to be kept protected for 72 hours.

## **STORAGE AND PACKING**

5 kg/bucket containing both components A + B. Storage life 24 months if the product is kept in dry conditions away from sunlight and stored in the original unopened packaging.

## **HEALTH AND SAFETY**

Recommend wearing a NIOSH-approved or equivalent particulate face mask when mixing the material.

The material contains cement, which may produce an allergic reaction.

Keep out of reach of children.

Material may cause irritation to the eyes and skin. In case of contact with the eyes, rinse immediately with plenty of water and seek medical assistance. After contact with skin, wash immediately with plenty of soap and water.

Please refer to the Material Safety Data Sheet (MSDS) for health, safety and handling of the product.

## **CLEANING & DISPOSAL OF WASTE**

Cured material can be removed mechanically; if uncured, material can be removed with water. Dispose of waste in accordance with legislation.

\* Note: The information and physical data in this catalogue are given to the best of our knowledge under standard testing methods and a controlled environment. The results may vary with different weather/site conditions, workmanship or substrates. This is beyond our control, and we shall not be liable for any faults or consequences arising from or associated with this. We suggest that comprehensive tests be conducted before the final application. Unless specified, all technical data are average values with a curing time of 28 days. We reserve the right to update or amend the contents in the light of new findings during the course of research and development.