MATERIA POXY data sheet

Decorative epoxy filler for grouting ceramic and glass materials. Ideal for mosaic grouting.

Technical characteristics
Filler consisting of two components which, mixed at the time of use, gives rise to a mixture which is easily workable and can be cleaned with water only immediately after laying.

- Correctly applied, it provides a completely smooth finish with translucent effect, is non-absorbent, easy to clean and therefore extremely hygienic.
- Drying takes place without shrinkage and therefore without cracks or fissures, in a time that varies depending on the ambient temperature.
- The grouting is resistant to attack by chemicals and the colour remains unchanged over time.
- It creates a translucent and highly decorative chromatic effect.
- It can also be used for bonding ceramics and glass with high mechanical and chemical resistance.

Classification according to EN 2004, class R2T.
Classification according to EN 13888, class RG.

Fields of application
- Grouting of high decorative value finishes.
- Decorative grouting resistant to aggressive chemicals for ceramic floors and wall tiles.
- Application and grouting in saunas and wellness centres.
- Quick drying and chemical resistant application of ceramic tiles of all types.
- Gluing and grouting in pools with thermal or brackish water.
- Gluing of tiles and mosaics in fibreglass pools. Gluing on PVC.

Important notices
- Do not use for elastic expansion joints or those subject to movement.
- Do not use for grouting ceramic floors and walls subject to attack by oleic acid (oil, salami factories).
- Do not apply on tiles with wet, dusty, oily or greasy edges.
- Do not use for grouting terracotta tiles or those with absorbent surface to avoid difficulty in cleaning.
- Before grouting porcelain stoneware (also polished) and stone materials, perform some preliminary tests.
- Do not use for grouting ceramic tiles in tanks containing drinking water.
- Do not add water or any other product to MATERIA POXY and keep to the ready-mixed mixing ratios.
- Use the product at temperatures between +10°C and +30°C.
- If it is necessary to remove hardened MATERIA POXY grouting use an industrial - blower.
Preparation of the substrate
Before applying MATERIA POXY ensure that the joints are perfectly clean, dry and free from oil, grease and paint. Before grouting, it is essential that the tile laying mortar is dry and has no residual moisture.

Preparation of the mixture
Pour the hardener (component B) into the container of component A and mix thoroughly until a homogeneous paste is achieved, preferably using a low speed mechanical mixer.

Application of the mixture as grouting material
MATERIA POXY is applied in joints with a flexible steel or stiff rubber spatula, taking care to fill the entire volume of the joint. Remove excess sealant with a rigid rubber spatula diagonally. The ambient temperature affects both the drying time and the time to wait before subjecting the sealant to chemical attack. Use at temperatures below 10°C is not recommended because application would be very difficult. At the optimal temperature of +20°C the mixture is soft and easily workable. The hardening process starts after about 40 minutes and the floor can be walked on after 12-15 hours. Resistance to chemicals is obtained after 3/4 days. With MATERIA POXY cleaning must be carried out while “wet” within 30 minutes of application, emulsifying with water and an abrasive sponge, rubbing until complete removal of residues, taking care not to empty the joints (replace the sponge when too impregnated with resin). The part emulsified in water can be collected with a rubber squeegee, taking care not to wet the joints still to be grouted, and can be sucked up with an aspirator for liquids. Final cleaning can be carried out with water and alcohol at the start of hardening and before this is complete. MATERIA POXY cannot be cleaned once hardened, if not mechanically with serious risk to the surface of the tiles.

Application of the mixture as an adhesive
Mix the MATERIA POXY as described earlier, and spread it on the support with a notched spatula. Then lay the materials to be glued, applying enough pressure so as to ensure complete wetting of the surfaces in contact.

Rules to be adopted during application and laying
ADEPOXY ARREDO may cause skin irritation. It is recommended to use gloves and goggles in all stages of preparation and use. When application takes place indoors, create aeration. In case of contact with the eyes, rinse thoroughly with water and consult a doctor. CONSULT THE SAFETY DATA SHEET.

Technical Data (at +23°C and 50% R.H.)

<table>
<thead>
<tr>
<th></th>
<th>Comp. A</th>
<th>Comp. B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>various</td>
<td>yellow</td>
</tr>
<tr>
<td>brown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>1.64 g/cm³</td>
<td>1.06 g/cm³</td>
</tr>
<tr>
<td>Solid residue</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Brookfield viscosity (mPa.s)  

| 550.000 | 22 000 |

Store at a temperatures exceeding +10°C  

24 months in original package.  

AVOID FREEZING

Safety  

irritating    corrosive

Check the information on the packaging and on the safety data sheet.

Flammability  

no    no

Customs item  

3506 91 00

Application Data

Mixture ratio  

9 :1

Mixture consistency  

smooth paste

Mixture density  

1.55 g/cm³

Duration of mixture  

45 minutes

Temperature of application  

between +12°C and +30°C

Open time  

30 minutes

Registration time  

60 minutes

Transitivity  

after 24 hours

In service  

after 4 days

Final hardening  

after 15 days

Final Performance

Initial adhesion  

25.0 N/mm²

Adhesion after immersion in water  

23.0 N/mm²

Adhesion after thermal shock  

25.0 N/mm²

Resistance to compression  

50 N/mm²

Resistance to flection  

31 N/mm²

Resistance to abrasion  

147 (loss in mm³)

Shrinkage (mm/ml)  

0.80

Water absorption  

0.05 g

Resistance to humidity  

excellent

Resistance to ageing  

excellent

Resistance to solvents and oils  

very good

Resistance to alkalis and acids  

excellent

Temperature of operation  

between -20°C and +100°C

Consumption (Kg/m²)

"MATERIA POXY" CONSUMPTION TABLE (Kg/m²)

<table>
<thead>
<tr>
<th>FORMAT (cm), thickness 10 mm</th>
<th>JOINT WIDTH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Format (cm)</td>
<td>Thickness (mm)</td>
</tr>
<tr>
<td>------------</td>
<td>----------------</td>
</tr>
<tr>
<td>180 X 80</td>
<td>0.1</td>
</tr>
<tr>
<td>180 X 40</td>
<td>0.1</td>
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<td>120 X 120</td>
<td>0.1</td>
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<tr>
<td>120 X 60</td>
<td>0.1</td>
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<tr>
<td>120 X 30</td>
<td>0.2</td>
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<tr>
<td>120 X 20</td>
<td>0.2</td>
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<tr>
<td>120 X 15</td>
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<tr>
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<td>40 X 21</td>
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<tr>
<td>30 X 30</td>
<td>0.25</td>
</tr>
<tr>
<td>15.2 X 15.2</td>
<td>0.5</td>
</tr>
</tbody>
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"MATERIA POXY" for mosaic CONSUMPTION TABLE (kg/m²)

<table>
<thead>
<tr>
<th>FORMAT (cm) thickness (mm) in brackets</th>
<th>JOINT WIDTH 3 mm</th>
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<tbody>
<tr>
<td>1.8 X 1.8 (4.5)</td>
<td>2.7</td>
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<tr>
<td>5 X 5 (10)</td>
<td>2</td>
</tr>
<tr>
<td>22.5 X 25 (4.5)</td>
<td>1.2</td>
</tr>
</tbody>
</table>

MATERIA POXY packaging: 3 Kg drum (Comp. A: 2.7 Kg - Comp. B: 0.3 Kg)