## Kemapoxy 175 T

Extra - Ordinary Elastic Polyurethane-epoxy Tar System.

### Description:
- **KEMAPOXY 17ST** is a two components system based on modified polyurethane epoxy tar and elastified hardener, with high solid content.
- Complies with ES 3303, ES 1382.

### Fields of Use:
- Durable industrial flooring with very high resistance to abrasion and chemical attack.
- Screed flooring for steel bridges.
- Waterproofing membrane for concrete and steel structures with high resistance to chemical attack.
- Crack bridging coating to seal concrete surfaces in which cracks already appeared or in which cracking is to be expected.
- Final coating material for surfaces exposed to mechanical loads and chemical attack such as garages, side walks, platforms, roads, factories, stores ... etc.
- Interior epoxy coating for sanitary sewage installations.

### Advantages:
- High resistance to chemicals and petroleum attacks.
- High resistance to mechanical stresses.
- Suitable for bridging of concrete cracks because of its high elasticity properties.
- Suitable as final coats for the surfaces which are exposed to heavy and light traffic.
- Can be mixed with filling materials and used as final layers for steel bridge surfaces.
- Can be mixed with rubber fillers for the flooring of play grounds and courts.

### Technical Data :

- Colour: Black
- Solid content (by weight): 98 %
- Density: 1.13± 0.02kg/l
- Mixing ratio A: B ( by weight): 1 : 1
- Pot life: 60 minutes (decreases at higher temperatures)
- Initial setting time: 18 hours
- Final setting time: 72 hours
- Full hardness: 7 days
- Recoating time: 24 - 48 hours
- Min application temperature: 5°C
- Elongation: 138 %
- Rate of use (theoretical): 300 gm/m²/coat (250 µ)

### Chemical Resistance : ASTM C 267

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Concentration</th>
<th>Resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulphuric acid</td>
<td>50%</td>
<td>ex: excellent (no softening + no bubbles+ no change in colour)</td>
</tr>
<tr>
<td>Hydrochloric acid</td>
<td>10%, 25%</td>
<td>ex: excellent (no softening + no bubbles+ slight change in colour and weight)</td>
</tr>
<tr>
<td>Phosphoric acid</td>
<td>30%, 50%</td>
<td>ex: excellent (no softening + no bubbles+ slight change in colour and weight)</td>
</tr>
<tr>
<td>Nitric acid</td>
<td>10%, 20%</td>
<td>g: good</td>
</tr>
<tr>
<td>Acetic acid</td>
<td>20%</td>
<td>g: good</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Concentration</th>
<th>Resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>50%</td>
<td>ex: excellent</td>
</tr>
<tr>
<td>Potassium hydroxide</td>
<td>50%</td>
<td>ex: excellent</td>
</tr>
<tr>
<td>Ammonium nitrate</td>
<td></td>
<td>ex: excellent</td>
</tr>
<tr>
<td>Fuels</td>
<td>Petrol</td>
<td>ex: excellent</td>
</tr>
<tr>
<td></td>
<td>Benzin</td>
<td>ex: excellent</td>
</tr>
</tbody>
</table>

Immersion time 7 days
## Directions for Use:

### A - Painting:
- The substrate must be dry, clean, free of oils, etc.
- The two components of **KEMAPOXY 175T** must be mixed thoroughly and applied in one or more coats using brush, roller or sprayer.
- Clean tools by **KEMSOLVE 1**

### B- Polyurthane Epoxy tar mortar for screeding Metallic or concrete bridges:
- Steel surfaces should be sandblasted till removing rust and old layers completely and other impurities.
- Concrete surfaces should be dry, firm, even free from laitance, dirt, oil, grease and other impurities.
- Prime surfaces with 2-coats of Kemapoxy 131E (for steel surfaces) rate of 200 gm/m²/coat and Kemapoxy 103T (for concrete surfaces) rate of 200 gm/m²/coat.
- Sprinkle the freshly second primer coat with fire dried quartz sand 0.2-0.7 mm (rate 1 kg/m²).
- After well mixing the 2 components of **KEMAPOXY 175T** the mix should be poured in special mixer and filling granules should be added in the mixer according to the shown table and depending on required screed thickness.
- After laying mortar, especial granules - as in table - should be sprinkled on the fresh mortar then rolled with special steel roller.

## Rate of use for KEMAPOXY 175 T mortar for steel bridges:

<table>
<thead>
<tr>
<th>Screed thickness</th>
<th>2-3 mm</th>
<th>&gt;3 mm- 6 mm</th>
<th>&gt;6mm-10mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratio of KEMAPOXY 175T: fillers</td>
<td>1:1</td>
<td>1:1</td>
<td>1:1.5</td>
</tr>
<tr>
<td>Types of fillers</td>
<td>Graded quartz 0.7-1.2 mm</td>
<td>50% graded quartz 0.3-0.8 mm</td>
<td>33% graded quartz 0.3-0.8 mm</td>
</tr>
<tr>
<td></td>
<td>50% bazalt granules 1-2 mm</td>
<td>67% bazalt granules 3-4 mm</td>
<td></td>
</tr>
<tr>
<td>Rate of consumption of KEMAPOXY 175 T</td>
<td>1.5 kg/m²</td>
<td>2-3 kg/m²</td>
<td>3-4 kg/m²</td>
</tr>
<tr>
<td>Sprinkled granules</td>
<td>Graded quartz Rate : 2.5kg/m²</td>
<td>Bazalt granules 2-3 mm Rate 2 kg/m²</td>
<td>Bazalt granules 4-6 mm Rate : 5 kg/m²</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bazalt granules 1-2 m Rate : 1 kg/m²</td>
<td>Bazalt granules 2-3 mm Rate : 2 kg/m²</td>
</tr>
</tbody>
</table>

## Safety Precautions:
- Application should be carried out in well ventilated place.
- Gloves, protective clothing and eye goggles should be worn during application.
- Skin contaminations should be immediately cleaned with soap and plenty of water. Don't use solvent.
- If the material is splashed into the eyes, they should be immediately washed with water and then report to an eye specialist.
- Do not eat or smoke during application.

## Storage:
- 2 years under suitable storage conditions in closed containers.

## Packages:
- Kits ( A + B ). 1 kg, 4 kg and 8 kg.
- Follow the mixing ratios ,by weight , indicated on the package.