PROTEGOL® UR Coating 32-55 PN ML
two-component polyurethane coating

**Description**

PROTEGOL® UR Coating 32-55 PN M/L is a two-component polyurethane coating. The product meets the requirements of ISO 21809-3:2016. Application is made by Spatula, knife oder Brush. PROTEGOL® UR Coating 32-55 PN M/L has a high resistance against cathodic disbonding even at higher temperatures.

**Uses**

Coating of
- Field joints

**Benefits**

- Excellent corrosion protection
- High resistance against cathodic disbonding up to 80 °C
- Abrasion-resistant and impact-resistant
- High temperature resistance
- Good adhesion to steel

**Referenced standards**

ISO 21809-3:2016  Petroleum and natural gas industries - External coatings for buried or submerged pipelines used in pipeline transportation systems - Part 3: Field joint coatings

**Product data**

The following data has been obtained at +23°C unless otherwise stated:

<table>
<thead>
<tr>
<th>Component</th>
<th>Type</th>
<th>Physical state</th>
<th>Viscosity (mPa*s) at 23°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>polyurethane</td>
<td>pasty</td>
<td>6500</td>
</tr>
<tr>
<td>B</td>
<td>polyol</td>
<td>liquid</td>
<td>200</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Density (g/cm³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comp. A</td>
</tr>
<tr>
<td>Comp. B</td>
</tr>
<tr>
<td>Comp. A + B</td>
</tr>
</tbody>
</table>

Mixing Ratio Comp A : Comp B
Gravimetric 75:25
Volumetric 2,3:1,0

**Coating properties**

Recommended dry film thickness (DFT) ≥1500 µm

Service temperature -20 °C to 80 °C
Short term temperature load without temperature gradient to the substrate 110 °C
T min substrate 10 °C
min. +3°C above dew point

Processing temperature
Component A 20 °C to 35 °C
Component B 20 °C to 35 °C

Max. relative air humidity 80 %

Potlife at 23 °C 30 min

Hardness Shore D 75 ± 5
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Impact resistance (max. impact energy) 13 J/mm
Adhesion to steel, pull off test 11.9 MPa
Cathodic disbondment after 28 d at 80 °C 5.40 mm
Specific electrical insulation resistance after 100 d at 23 °C 2.6*10^9 Ωm²
Cleaning agent Solvent B, G
Repair material PROTEGOL® PU Repair,
PROTEGOL® UR Coating 32-55 PN ML,
PROTEGOL® UR Coating 32-45/55 L (Cartridge),
PROTEGOL® UR Coating 32-60 (Cartridge)

Colours
RAL 6029 - Mint green
Other colours on request (subject to technical feasibility and minimum order quantities)

Coverage, theoretical
Approx. 1.48 kg/m² at 1.000 µm DFT and not considering excess consumption.

Packaging
Component A Component B
tin 1.50 kg tin 0.50 kg

Shipping and Storage Regulations, Application, Health and Safety

Storage:
In a cool and dry place shelf life is approx. 24 months in tightly closed original packs.

Maintenance of tools:
Immediately after use, all tools should be cleaned with Solvent B, G.

Refer to our general work instructions for PROTEGOL® Coatings.
Refer to our safety data sheets prior to use.

Carefully read and follow all safety instructions on labels and packaging. Handle and store material with care in accordance to the safety data sheets. Follow and observe any applicable local or national laws and regulations. Regulations regarding explosion protection with regard to the construction and equipment of facilities (machines) can be found, among other sources, in the corresponding harmonized European standard (DIN EN 16985 "Spray booths for organic coating material - Safety requirements" (former DIN EN 12215 and DIN EN 13355); furthermore, local laws and/or regulations must be observed. Contact us to make sure you have the latest version of safety data sheet, technical data sheet and work instruction at hand.