



TIBCHEMICALS

PROTEGOL® UR Coating 32-70 two-component polyurethane coating

Description

PROTEGOL® UR Coating 32-70 is a two-component polyurethane coating. The product meets the requirements of DIN EN 10290:2002, ISO 21809-3:2016, DIN EN 15189. Application is made by 2K airless hot spray system.

Uses

- Pipes, pipe bends
- Fittings
- Piling pipes
- Tanks, containers

Benefits

- High resistance against cathodic disbonding up to 80 °C
- No need for solvents
- Very fast reaction and curing time
- Abrasion and impact-resistant
- Good chemical resistance

Referenced standards

DIN EN 10290:2002 Steel tubes and fittings for onshore and offshore pipelines - External liquid applied polyurethane and polyurethane-modified coatings

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

DIN EN 15189 Ductile iron pipes, fittings and accessories - External polyurethane coating for pipes - Requirements and test methods

Product data

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

Type	polyurethane
Component A (base)	polyol
Component B (hardener)	isocyanate

Physical state:

Component A	pasty
Component B	liquid

Viscosity

Comp. A at 50 °C	1500 mPa*s
Comp. B at 25 °C	1000 mPa*s

Density (g/cm³)

Comp. A	1,50
Comp. B	1,13
Comp. A + B	1,31

Mixing Ratio Comp A : Comp B

Gravimetric	57:43
Volumetric	1,0:1,0

Coating properties

Recommended dry film thickness (DFT) ≥1500 µm

Actual required DFT may vary in certain applications, please contact us for technical clarification.

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 70 °C to 80 °C
Component B 60 °C to 70 °C

Max. relative air humidity 80 %

Potlife at 60 °C 30 sec

Hardness Shore D 75 ±5

Release 7/7/2020

TIB Chemicals AG | Muelheimer Straße 16 -22 | 68219 Mannheim | P.O. 81 02 20 | 68202 Mannheim | GERMANY
Telefon +49 621 8901-812 | Fax +49 621 8901-902 | info.protegol@tib-chemicals.com | www.tib-chemicals.com

This information is given to the best of our knowledge but without obligation. We are not liable for any wrong advice or any advice we may have failed to give. This data sheet becomes invalid as soon as a new edition has been published. Please contact us for latest.





TIBCHEMICALS

PROTEGOL® UR Coating 32-70 two-component polyurethane coating

Impact resistance (max. impact energy)	10 J/mm
Adhesion to steel, pull off test	21 MPa
Cathodic disbondment after 28 d at 80 °C	8,60 mm
Specific electrical insulation resistance after 100 d at 23 °C	1,5*10 ¹⁰ Ωm ²
Thermal aging, adhesion, pull off test after 100 d at 100 °C	28 MPa
Flexural strength	Req. fulfilled
Elongation at break [%]	15
Cleaning agent	Solvent B, G
Repair material	
PROTEGOL® PU Repair	

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.

Colours

RAL 9011 - Graphite black

Other colours on request (subject to technical feasibility and minimum order quantities)

Coverage, theoretical

Approx. 1,31 kg/m² at 1.000 µm DFT and not considering excess consumption.

Packaging

Component A	Component B
barrel 210,00 kg	barrel 210,00 kg
hobbock 25,00 kg	hobbock 25,00 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.

Release 7/7/2020

TIB Chemicals AG | Muelheimer Straße 16 -22 | 68219 Mannheim | P.O. 81 02 20 | 68202 Mannheim | GERMANY
Telefon +49 621 8901-812 | Fax +49 621 8901-902 | info.protegol@tib-chemicals.com | www.tib-chemicals.com

This information is given to the best of our knowledge but without obligation. We are not liable for any wrong advice or any advice we may have failed to give. This data sheet becomes invalid as soon as a new edition has been published. Please contact us for latest.

