



TIBCHEMICALS

PROTEGOL® UR Coating 32-46 two-component polyurethane coating

Description

PROTEGOL® UR Coating 32-46 is a two-component polyurethane coating. The product meets the requirements of AWWA C222-18, Commission Regulation (EU) No 10/2011, Royal Decree 847/2011.

Application is made by 2K airless hot spray system.

Uses

- Internal and external coating
- Pipes, pipe bends
- Fittings

Benefits

- Good impact resistance
- Abrasion resistant
- Good corrosion protection
- Good chemical resistance

Referenced Standards

AWWA C222-18 Polyurethane Coatings and Linings for Steel Water Pipe and Fittings

Commission Regulation (EU) No 10/2011 Commission Regulation (EU) No 10/2011 of 14 January 2011 on plastic materials and articles intended to come into contact with food

Royal Decree 847/2011 Royal Decree 847/2011, June 17: Positive list of permitted substances for the manufacture of polymeric materials intended to come into contact with food

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	viscous
Component B	liquid

Viscosity	
Comp. A at 25 °C	4500 mPa*s
Comp. B at 25 °C	150 mPa*s

Density (g/cm ³)	
Comp. A	1,43
Comp. B	1,20
Comp. A + B	1,35

Mixing ratio Comp A : Comp B	
Gravimetric	71:29
Volumetric	2,0:1,0

Coating properties

Recommended dry film thickness	≥1200 µm
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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
Minimum surface temperature min. +3°C above dew point	10 °C
Processing temperature	
Component A	40 °C to 60 °C
Component B	30 °C to 50 °C
Max. rel air humidity	80 %
Potlife at 25 °C	150 sec

Coating properties according to DIN EN 10290:2002 (typical values)

Adhesion to steel	>17 Mpa MPa
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Coating properties according to AWWA (typical values)

Hardness Shore D acc. to ASTM D2240	>65
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Cath. disbondment (30 d, 23°C, ASTM G8)	3 mm
Flexibility (ASTM D522)	pass
Abrasion resistance (ASTM D4060)	26 mg (500 r)
Abrasion resistance (ASTM D4060)	66 mg (1000 r)
Impact resistance (ASTM G14)	12 J
Dielectric strength (ASTM D149)	33 kV/mm
Water absorption (ASTM D570)	pass
Chemical resistance (ASTM D543)	pass

Coating properties according to other standards (typical values)

Cleaning agent	Solvent B, G
Repair material	PROTEGOL® UR Coating 32-46 Repair

Colours

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

Coverage, theoretical

Approx. 1,35 kg/m² at 1.000 µm DFT and not considering excess consumption.

Packing

Component A	Component B
barrel 250,00 kg	barrel 225,00 kg
hobcock 30,00 kg	hobcock 25,00 kg

Shipping and Storage Regulations, Application, Health and Safety

Storage:

In a cool and dry place shelf life is approx. 24 months for comp. A and 12 months for comp. B 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 with 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 (BS EN 16985:2018-12-14 "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.

Important Notice:

The information on the properties of the product components represent average values that correspond to our defined quality specifications. Our products are manufactured and controlled in accordance with strict quality management and quality control requirements, which are subject to ISO 9001: 2015 certification. Information on the default values defined by us are given in the acceptance test certificates. The product properties marked as "typical values" are taken from the test reports of external institutes, unless otherwise stated.

The information in our documents in printed or electronic form is based on our knowledge and experience. Due to numerous possible influences in the processing and application of our products, our statements do not release the processor from the responsibility to test the goods for their own procedures and purposes; Legally binding assurance of certain properties or suitability for a specific application cannot be derived from our information. It is the responsibility of the recipient of our products to observe any property rights as well as existing laws and regulations.

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