



TIBCHEMICALS

PROTEGOL® EPN Coating 180 two-component epoxy coating

Description

PROTEGOL® EPN Coating 180 is a two-component epoxy-phenol-novolac coating. The product meets the requirements of DIN EN 10289:2002. Application is made by 2K airless hot spray system.

Uses

External coating of

- Pipes, pipe bends
- Fittings
- Field joints
- Tanks, containers

Internal coating of

- Pipes, pipe bends

Benefits

- Abrasion and impact-resistant
- High temperature resistance
- High resistance against cathodic disbonding up to 180 °C
- Good chemical resistance

Referenced standards

DIN EN 10289:2002 Steel tubes and fittings for onshore and offshore pipelines - External liquid applied epoxy and epoxy-modified coatings

Product data

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

Type	epoxy-phenol-novolac
Component A (base)	epoxy-phenol-novolac
Component B (hardener)	amine
Physical state:	
Component A	pasty
Component B	liquid
Viscosity	
Comp. A at 25 °C	17000 mPa*s
Comp. A at 60°C	740 mPa*s
Comp. B at 25 °C	2700 mPa*s
Comp. B at 60°C	400 mPa*s
Density (g/cm ³)	
Comp. A	1,60
Comp. B	1,40
Comp. A + B	1,53
Mixing Ratio Comp A : Comp B	
Gravimetric	70:30
Volumetric	2,0:1,0

Coating properties

Recommended dry film thickness (DFT)	≥800 µm
<small>Actual required DFT may vary in certain applications, please contact us for technical clarification.</small>	
Service temperature	-20 °C to 180 °C
Short term temperature load without temperature gradient to the substrate	200 °C
T min substrate	10 °C
<small>min. +3°C above dew point</small>	
Processing temperature	
Component A	50 °C to 80 °C
Component B	50 °C to 80 °C
Max. rel air humidity	80 %
Potlife at 60 °C	10 min
Hardness Shore D	90±5

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Impact resistance (max. impact energy)	6 J/mm
Adhesion to steel, pull off test	16 MPa
Cathodic disbondment after 28 d	
at 23 °C (DIN EN 10289:2002)	2,8 mm
at 150°C (CSA Z245.20-18)	10,8 mm
at 180°C (CSA Z245.20-18)	11,2 mm
Specific electrical insulation resistance	
after 100 d at 23 °C	5*10 ¹⁰ Ωm ²
Adhesion to steel after thermal aging	
after 100 d at 100 °C	9 MPa
Elongation at break [%]	>3
Cleaning agent	Solvent G

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

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

Coverage, theoretical

Approx. 1,53 kg/m² at 1.000 µm DFT and not considering excess consumption.

Packaging

Component A	Component B
barrel 300,00 kg	barrel 250,00 kg
hobcock 30,00 kg	hobcock 30,00 kg

Shipping and Storage Regulations, Application, Health and Safety

Storage:

In a cool and dry place shelf life is approx. 12 months in tightly closed original packs.

Maintenance of tools:

Immediately after use, all tools should be cleaned with Solvent G.

Refer to our general work instructions for PROTEGOL® Coatings.

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