

# TEKNOLINE EP 305

## Epoxy phenol novolac paint

TEKNOLINE EP 305 is a two-pack epoxy phenol (novolac) primer cured in temperatures from 0°C. It may be used as single paint protection system.



The paint is used as external coating for the protection of insulated (CUI) and uninsulated process pipework and vessels.

The coating has very good adhesion to substrates and high temperature resistance (up to 200°C). Exposed to temperature, the surface may change the shade, without negative effect on the surface properties.



### TECHNICAL DATA

<b>Fields of application</b>	Pipelines, Storage tank
<b>Recommended substrate</b>	Steel
<b>Binder</b>	Epoxy phenol novolac
<b>Solids</b>	73±2% by volume (ISO 3233)
<b>Total mass of solids</b>	Approx. 1280 g/l
<b>Volatile organic compound (VOC)</b>	Approx. 350 g/l (DIRECTIVE 2010/75/EU)

The VOC value provided is the average value for factory produced products, and consequently it will be subject to variations between individual products covered by this Technical Data Sheet.

<b>Theoretical spreading rate</b>	<b>Dry film (µm)</b>	<b>Wet film (µm)</b>	<b>Theoretical spreading rate (m<sup>2</sup>/l)</b>
	80	110	9.1
	150	205	4.9

As many of the paint's properties will change if too thick coats are applied, it is not recommended that the product is applied to a film thickness that is more than double of the thickest recommended film.

**Practical spreading rate** The values depend on the application technique, surface conditions, overspray, etc.

<b>Colours</b>	TO-320 sandy, TO-990 black, TO-290- brown, RAL 7035
<b>Gloss (60°)</b>	Matt
<b>Hardener</b>	Comp. B: TEKNOLINE EP HARDENER 7304
<b>Mixing ratio (A:B)</b>	8:1 parts by volume
<b>Pot life, +23°C</b>	3 h
<b>Thinner</b>	TEKNOSOLV 9506

**Storage**

The storage stability is shown on the label. Store in a cool place and in tightly closed containers.

**DIRECTION FOR USE**

**Surface preparation**

Remove from the surfaces any contaminants that might be detrimental to surface preparation and application. Remove also water-soluble salts by using appropriate methods. The surfaces are prepared according to the different materials as follows:

**STEEL SURFACES:** Remove mill scale and rust by blast cleaning to preparation grade Sa 2½ (standard ISO 8501-1). The profile of the blast-cleaned surface must be at least coarse (reference comparator "G"). See standard ISO 8503-2 (G). Occasionally, it is allowed to paint on spots cleaned to P St 3 according to PN-EN ISO 8501-2.

The place and time of the preparation are to be chosen so that the prepared surface will not get dirty or damp before the subsequent treatment.

Additional instructive information for surface preparation can be found in standards EN ISO 12944-4 and ISO 8501-2.

**Application method**

Airless spraying, Brush

**Application**

Take into consideration the pot life of the mixture when estimating the amount to be mixed at a time. Before application the base and hardener are mixed in right proportion. Stir thoroughly down to the bottom of the vessel. Wait 15 min (at 23°C) before use. Mixing by machine is recommended, for example a slow-rotating hand-drill equipped with a mixer. Inadequate stirring or incorrect mixing ratio results in imperfect curing and impaired film properties.

Apply by airless spray or brush (brush – only for small surfaces).

Airless spray parameter:

Nozzle size 0.015 - 0.019".

Nozzle pressure 10-15 MPa.

When preparing painting specification, depending on subject and type of construction, different dry film thickness than recommended can be assumed. During airless spray application typical dry film thickness range is between 80 and 300 µm. Different dry film thickness than recommended causes change in theoretical spreading rate, wet film thickness, weight of dry film thickness, drying time, overcoating time and ready for handling time. It should be remembered that increasing the degree of cleanliness of the substrate extends the durability of the paint coating.

### Application conditions

During the application and drying period the temperature of the ambient air shall be above 0°C and the relative air humidity below 80%. The minimum temperature of the paint should be +15°C. Additionally, the temperature of the surface to be treated and the product must be at least +3°C above the dew point of the ambient air. Adequate ventilation during application and drying period is recommended.

#### Drying time

+23°C / 50% RH (dry film 100 µm)

#### - dust free

after 15 min

#### - touch dry

after 3 h

#### - fully cured

after 7 days

#### Overcoatable

Surface temperature	By itself	
	Min.	Max.
0°C	5 h	1 month
+5°C	4,5 h	1 month
+10°C	4 h	1 month
+23°C	3 h	1 month

A completely clean surface is mandatory to ensure the best intercoat adhesion. If the maximum overcoating interval has been exceeded, the surface must be roughened before overcoating. Increase in film thickness and rise in the relative humidity of the air in the drying space slow down the drying process and effect the overcoating properties.

If some other top coats besides the ones mentioned above are used, please contact Teknos representative for overcoating recommendations.

#### Cleaning

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## HEALTH AND SAFETY

#### Safety and precaution measures

See safety data sheet.

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