INERTA 271

Epoxy primer-topcoat

INERTA 271 is a two-pack high solid epoxy primer-topcoat.

Used in epoxy coating system as anticorrosive coating, primer or topcoat in high aggressive corrosion environment, where high solid content is needed. Also used as topcoat in other epoxy systems. It is recommended for surface protection of steel constructions inside of halls, warehouses and other objects.

The glossy surface, hard, mechanically resistant and well attached to subjects. The surface is resistant to atmospheric conditions.

TECHNICAL DATA

Fields of application	Steel constructions
Recommended substrate	Steel
Binder	Epoxy
Solids	80±2% by volume (ISO 3233)
Total mass of solids	Approx. 1300 g/l
Volatile organic compound (VOC)	Approx. 200 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.
Theoretical spreading rate	<table><tr><th>Dry film (µm)</th><th>Wet film (µm)</th><th>Theoretical spreading rate (m²/l)</th></tr><tr><td>80</td><td>100</td><td>10.0</td></tr><tr><td>100</td><td>125</td><td>8.0</td></tr><tr><td>150</td><td>188</td><td>5.3</td></tr></table>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.
Colours	NOTE! Sunlight and chemicals cause the colour and glossiness to change in time. Exposed to direct sun radiation, the surface may chalk or change the shade.
Tinting system	Teknotint
Gloss (60°)	Gloss

Hardener	Comp. B: INERTA 271 HARDENER
Mixing ratio (A:B)	100:24 parts by volume
Pot life, +23°C	1,5 h
Thinner	Not needed. If necessary (eg. rise in viscosity) use TEKNOSOLV 9506 (check addition info).
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: The surface to be treated must be dry, without any contamination (grease-, salt-, dust-free), cleaned to the degree of cleanliness according to PN-ISO 8501-1: Sa 2½ for constructions operating in aggressive environment; Sa 2 for constructions used in atmospheric conditions; St 3 for internal surfaces. THE SURFACE OF EPOXY PRIMER: The surface to be treated must be dry, without any visible defects, corrosion-, grease-, salt- or any contamination-free. 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. 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 (only for small areas). For brush painting it is recommended to thin paint (abt. 3% of thinner) and to paint several times to achieve typical dry film thickness.
Airless spray parameter:
Nozzle size 0.013" - 0.021".
Nozzle pressure 20 - 30 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 70 and 250 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.

Application conditions

During the application and drying period the temperature of the ambient air and the surface shall be above +5°C and the relative air humidity below 90%. 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. The minimum temperature of the paint should be +15°C. Adequate ventilation during application and drying period is recommended.

Drying time
+23°C / 50% RH (dry film 100 µm)

- dust free
after 3 h

- touch dry
after 5 h

- fully cured
after 7 days

Overcoatable

Surface temperature	By itself	
	Min.	Max.*
+5°C	24 h	2 months
+10°C	10 h	2 months
+23°C	5 h	1 month

* Maximum overcoating interval without roughening.

Increase in film thickness and rise in the relative humidity of the air in the drying space usually slow down the drying process. Given indications relates to the recommended coating thickness, drying in good ventilation conditions. Overcoating times may be different with a change of temperature, ventilation, number of layers and the thickness of the coating.

Cleaning	TEKNOSOLV 9506

HEALTH AND SAFETY

Safety and precaution measures	See safety data sheet.

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