

# INERTA 210

## Epoxy coating

INERTA 210 is a two-pack epoxy paint with low solvent content.

Used on steel and concrete in surfaces. Also suitable for touching up epoxy powder coatings.



INERTA 210 has good adhesion to blast-cleaned steel and excellent abrasion resistance. The coating has good resistance to water, chemical solutions, grease and certain solvents. In water immersion the temperature must not rise over +40°C. For other chemicals the highest temperature allowed is defined individually. Can be applied by airless spray, roller or brush.

### TECHNICAL DATA

<b>Certificates, approvals and classification</b>	CE marking		
<b>Recommended substrate</b>	Steel, Concrete		
<b>Binder</b>	Epoxy		
<b>Solids</b>	94 ±2% by volume		
<b>Total mass of solids</b>	Approx. 1400 g/l		
<b>Volatile organic compound (VOC)</b>	Approx. 50 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 (m²/l)</b>
	250	265	3.8
	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.		
<b>Practical spreading rate</b>	The values depend on the application technique, surface conditions, overspray, etc.		
<b>Colours</b>	A limited range of colours according to the Industrial Colour Card.		
<b>Gloss (60°)</b>	Gloss		
<b>Hardener</b>	Comp. B: INERTA 210 HARDENER		
<b>Mixing ratio (A:B)</b>	2:1 parts by volume		
<b>Pot life, +23°C</b>	30 min.		
<b>Thinner</b>	TEKNOSOLV 9506		
<b>Storage</b>	The storage stability is shown on the label. Must be stored tightly closed and kept cool.		

## 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).

**CONCRETE SURFACES:** The concrete must be at least 4 weeks old, well-hardened and solid. The water content of the top layer must not exceed 4% by weight. Smooth down any spatter and irregularities on the surfaces by grinding. Brush away loose cement, sand and dust. Wash oily and greasy surfaces with detergent or solvent. Remove dense laitance if present by etching with RENSA ETCHING etching liquid or by grinding or blast-cleaning.

**OLD PAINTED SURFACES SUITABLE FOR OVERCOATING:** Any impurities that might be detrimental to the application of paint (e.g. grease and salts) are removed. The surfaces must be dry and clean. Old, painted surfaces that have exceeded the maximum overcoating time are to be roughened as well. Damaged parts are prepared in accordance with the requirements of the substrate and the maintenance coating.

Severely pitted steel can be stopped up with TEKNOPOX FILL epoxy stopper.

Big cavities in the concrete are repaired with cement mortar immediately after the removal of moulds. Before the product is applied, all holes are to be filled, and if necessary, the whole surface is stopped up with water-borne TEKNOPOX AQUA FILL 5900 Epoxy Stopper or with solvent-free TEKNOPOX FILL Epoxy Stopper.

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.

All prefabrication primer coats must be completely removed regardless of the binder type. In practice this means that when the surface is viewed vertically from a distance of 1 meter and in normal lighting conditions the surface is of an evenly grey colour, i.e. the preparation grade is Sa 2½ (ISO 8501-1).

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

**Application method**

Hot twin feed-spraying

**Application**

**MIXING OF THE COMPONENTS:** 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 with airless spray with great pressure ratio. Use either one-component airless spray or hot twin-feed spray, e.g. Graco Hydra-Cat. Suitable nozzle size (turn-nozzle) 0.018 - 0.026". Brush or roller can be used for touching up. Take the pot life of the paint into consideration while painting.

**Application conditions**

The surface to be treated must be dry. During the application and drying period the temperature of the ambient air, the surface and the product shall be above +15°C and the relative air humidity below 80%. 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.

**Thinning**

For application by conventional airless spray the paint can be thinned by adding 5% TEKNOSOLV 9506.

**Drying time**

+23°C / 50% RH (dry film 250 µm)

**- dust free**

6 h (ISO 9117-3:2010)

**- touch dry**

12 h (ISO 9117-5:2012)

**- fully cured**

7 d

**Overcoatable**

surface temperature	by itself	
	min.	max.*
+15°C	8 h	36 h
+23°C	4 h	24 h

\* 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.

**HEALTH AND SAFETY****Safety and precaution measures**

See safety data sheet.



**0809**

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Declaration of Performance No. 0001

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Surface protection products – Coating

Physical resistance (5.1)

Chemical resistance (6.1)

Abrasion resistance	Requirement: Weight loss less than 3000 mg
Capillary absorption and permeability to water	Requirement: $w < 0,1 \text{ kg/m}^2 \times \sqrt{h}$
Resistance to severe chemical attack	Requirement: Reduction in hardness of less than 50 %
Impact resistance	Class I: $> 4 \text{ Nm}$
Adhesion strength by pull-off test	Requirement: Rigid system with trafficking: $\geq 2,0 (1,5) \text{ N/mm}^2$
Dangerous substances	See safety data sheet

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