INERTA 200

Epoxy coating

INERTA 200 is a two-pack epoxy coating almost free of solvent and based on liquid epoxy resin.

Use: On steel and concrete surfaces.

INERTA 200 provides excellent resistance to abrasion and good adhesion to steel (blast-cleaned to grade Sa 2½) as well as to aluminium and concrete. It has good resistance to water, chemical solutions and grease, and certain solvents even on immersion. In water immersion the temperature must not rise above +40°C. For other chemicals the highest temperature allowed is defined individually.
INERTA 200 is certified in Russian Federation for use in food industry and potable water tanks and pipes (GSEN, 2000; Pamfilov, 2012).
The coating is applied by twin-feed spray, whereby a film thickness of 500 µm is achieved in one application.

TECHNICAL DATA

Recommended substrate	Steel, Concrete
Binder	Epoxy
Solids	96 ±2% by volume
Total mass of solids	Approx. 1400 g/l
Volatile organic compound (VOC)	Approx. 40 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 (m^2/l)</th></tr><tr><td>500</td><td>520</td><td>1.9</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	Base: white, hardener: black, mixture light grey. (Base is supplied tinted with some limits).
Gloss (60°)	Gloss
Hardener	Comp. B: INERTA 200 HARDENER
Mixing ratio (A:B)	2:1 parts by volume
Pot life, +23°C	20 min.

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). 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. 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 TEKNOPOX AQUA FILL 5900 water-borne 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	INERTA 200 is applied by hot twin-feed spray, e.g. Graco Hydra-Cat. Suitable nozzle size (turn-nozzle) 0.021 - 0.026". Brush or roller can be used for touching up. The components must be kept at a temperature of +20 - +25°C before use so that they are fluid enough for the feed pumps. The ratio of the dosage pump must be 2 : 1. The heating of the components shall be adjusted so that the temperature in the gun is +40 - +50°C. The pot life of the mixture is then 5 min. If necessary, the hoses must be heated. The film thickness is controlled by a wet film gauge. The feed pump pressure and the consumption of components is to be checked to ensure of the correct mixing ratio. WARNING! The amount and the temperature of the mixture will affect the pot life. The spray equipment will be damaged if the paint is let to cure inside it. To fill the pores in concrete surfaces, a coat of 200 - 300 µm is first sprayed and smoothed by brush or rubber spatula over porous areas. Immediately thereafter another coat is applied to achieve the total coat thickness of 500 µm. Directions given by the manufacturer of the twin-feed spray are to be followed when working. For touching-up painting and application by one-component spray INERTA 210 can be used instead of INERTA 200.
Application conditions	The surface to be treated has to 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.
Drying time	+23°C / 50% RH (dry film 500 µm)
- dust free	3 h (ISO 9117-3:2010)
- touch dry	6 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.

Cleaning	TEKNOSOLV 6060 for food-processing areas, for other objects TEKNOSOLV 9506.

HEALTH AND SAFETY

Safety and precaution measures	See safety data sheet.

Teknos Group Oy Takkatie 3, P.O.Box 107 FI-00371 Helsinki, Finland Tel. +358 9 506 091