INERTA 51 A

Epoxy paint

INERTA 51 A is a two-pack solvent-borne epoxy paint.

The paint is used as primer or intermediate coat in painting systems for steel surfaces specially in nuclear power stations.

The paint film is very tight and provides good resistance to water and chemicals. The paint has good resistance to heat - even damp heat.

APPROVALS:
The paint comes up to the requirement specifications of STUK-YTO-TR 210: Research Report 1481-28-05-RTE by the Technical Research Centre of Finland.
The paint complies with requirements of ГОСТ Р 51102-97: Report Nos. 3800-02/1075 and 3800-02/1299.

TECHNICAL DATA

Certificates, approvals and classification	STUK-YTO-TR 210 (Finland)
Recommended substrate	Steel, Concrete
Binder	Epoxy
Solids	50 ±2% by volume
Total mass of solids	Approx. 970 g/l
Volatile organic compound (VOC)	Approx. 440 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	See table below 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	White and grey.

Dry film (µm)	Wet film (µm)	Theoretical spreading rate (m^2/l)
50	100	10.0
80	160	6.3
100	200	5.0
125	250	4.0

Gloss (60°)	Semi-matt
Hardener	Comp. B: INERTA 51 A HARDENER
Mixing ratio (A:B)	4:1 parts by volume
Pot life, +23°C	6 h
Thinner	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). Roughening the surface of thin-plate improves the adhesion of the paint to the substrate. 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. 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. Prefabrication primer: KORRO E Epoxy Prefabrication Primer can be used, when required.
Application method	Airless 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. Inadequate stirring or incorrect mixing ratio results in imperfect curing and impaired film properties. Stir thoroughly before use. Apply preferably by airless spray as only this method provides the recommended film thickness in a single operation. Suitable airless nozzle size 0.017 - 0.021". Brush can be used for touching up and painting small areas.
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 +10°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 **- dust free** **- touch dry**	+23°C / 50% RH (dry film 50 µm) 1 h (ISO 9117-3:2010) 5 h (ISO 9117-5:2012)
Overcoatable	

surface temperature	**by itself or INERTA 50 A, FOR OBJECTS IN ATMOSPHERIC EXPOSURE**		**by itself or INERTA 50 A, FOR SUBMERGED OBJECTS**	
	min.	max.*	min.	max.*
+10°C	12 h	6 months	36 h	7 d
+23°C	4 h	6 months	12 h	7 d

* 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 9506

HEALTH AND SAFETY

Safety and precaution measures	See safety data sheet.

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