

# INERTA 50 A

## Epoxy top coat and varnish

INERTA 50 A is a gloss two-pack epoxy top coat and varnish.

Used as a top coat in painting systems for steel surfaces specially in nuclear power stations.



The paint withstands aqueous solutions of chemicals, oils, greases and solvents. It withstands dry heat up to +150°C.

### 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 has been approved for use in the Russian Nuclear Power Plants. Report Nos. 3800-02/1075 and 3800-02/1299.

The paint complies with requirements of ГОСТ P 51102-97.

## TECHNICAL DATA

<b>Certificates, approvals and classification</b>	STUK-YTO-TR 210 (Finland)														
<b>Recommended substrate</b>	Steel														
<b>Binder</b>	Epoxy														
<b>Solids</b>	Paint: approx. 48 ±2% by volume Varnish: approx. 35 ±2% by volume														
<b>Total mass of solids</b>	Paint: approx. 700 g/l Varnish: approx. 400 g/l														
<b>Volatile organic compound (VOC)</b>	Paint: approx. 480 g/l Varnish: approx. 560 g/l														
<b>Theoretical spreading rate</b>	<table border="1"><thead><tr><th>Dry film (µm)</th><th>Wet film (µm)</th><th>Theoretical spreading rate (m<sup>2</sup>/l)</th></tr></thead><tbody><tr><td>paint: 40</td><td>83</td><td>12.0</td></tr><tr><td>paint: 50</td><td>104</td><td>9.6</td></tr><tr><td>varnish: 40</td><td>114</td><td>8.8</td></tr></tbody></table>	Dry film (µm)	Wet film (µm)	Theoretical spreading rate (m <sup>2</sup> /l)	paint: 40	83	12.0	paint: 50	104	9.6	varnish: 40	114	8.8		
Dry film (µm)	Wet film (µm)	Theoretical spreading rate (m <sup>2</sup> /l)													
paint: 40	83	12.0													
paint: 50	104	9.6													
varnish: 40	114	8.8													
	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>	Can be adjusted individually for customers by agreement.														
<b>Gloss (60°)</b>	Gloss														
<b>Hardener</b>	Comp. B: INERTA 50 A HARDENER														

<b>Mixing ratio (A:B)</b>	3:1 parts by volume
<b>Pot life, +23 °C</b>	6 h
<b>Thinner</b>	TEKNOSOLV 9506
<b>Storage</b>	The storage stability is shown on the label. Store in a cool place and in tightly closed containers.

## DIRECTION FOR USE

<b>Surface preparation</b>	<p>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:</p> <p>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.</p> <p>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.</p> <p>Additional instructive information for surface preparation can be found in standards EN ISO 12944-4 and ISO 8501-2.</p>
<b>Application method</b>	Airless spraying, Brush
<b>Application</b>	<p>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.</p> <p>Stir thoroughly before use.</p> <p>Apply by airless spray or brush. Suitable airless nozzle size 0.011 - 0.015".</p>
<b>Application conditions</b>	<p>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%.</p> <p>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.</p>
<b>Thinning</b>	If required, dilute with TEKNOSOLV 9506.

**Drying time** +23 °C / 50% RH (dry film 40 µm)  
**- dust free** 1 h (ISO 9117-3:2010)  
**- touch dry** 6 h (ISO 9117-5:2012)  
**Overcoatable**

surface temperature	by itself, FOR OBJECTS IN ATMOSPHERIC EXPOSURE		by itself, FOR SUBMERGED OBJECTS	
	min.	max.*	min.	max.*
+10 °C	24 h	3 months	36 h	7 d
+23 °C	12 h	3 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.

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

The above information is normative and based on laboratory tests and practical experiences. The information is noncommittal, and we cannot accept liability for the results obtained under working conditions beyond our control, and consequently the buyer or the user is not released from the obligation to test the suitability of our products for specific means and application methods under the actual application conditions. Our liability covers only damage caused directly by defects in the products supplied by Teknos. This product is intended for professional use only. This implies that the user possesses sufficient knowledge for using the product correctly with regard to technical and working safety aspects. The latest versions of Teknos' Technical Data Sheets and Safety Data Sheets are available from our homepage [www.teknos.com](http://www.teknos.com). All trademarks displayed on this document are the exclusive property of Teknos Group or its affiliated companies.