

# TEKNOPLAST HS 150 A

## Epoxy Paint

<b>PAINT TYPE</b>	TEKNOPLAST HS 150 A is a low solvent content two-pack epoxy paint.
<b>USAGE</b>	Used as a top coat in painting systems for steel surfaces specially in nuclear power stations. The paint has good adhesion to bare zinc, aluminium, thin-plate and acid-proof steel.
<b>SPECIAL PROPERTIES</b>	<p>TEKNOPLAST HS 150 A produces a thick coating that is resistant to chemicals. It is suitable for use on internal and external surfaces as well as on subterranean and submerged steel structures.</p> <p>The paint comes up to the requirements of STUK-YTO-TR 210: reports by VTT (Technical Research Centre of Finland) 1358-28-04-RTE and 1368-28-04-RTE. The paint has been approved for use in nuclear power plants in Scandinavia and comes up to the specifications of TBY (Technical regulations for surface treatment). The paint complies with requirements of GOCT P 51102-97.</p>

**TECHNICAL DATA**

<b>Mixing ratio</b>	Base (Comp. A): Hardener (Comp B): TEKNOPLAST A HARDENER	4 parts by volume 1 part by volume
<b>Pot life, +23 °C</b>	4 h	
<b>Solids</b>	70 ±2% by volume (ISO 3233:1988)	
<b>Total mass of solids</b>	abt. 1050 g/l	
<b>Volatile organic compound (VOC)</b>	abt. 300 g/l	
<b>Recommended film thickness and theoretical spreading rate</b>	Dry film (µm)	Wet film (µm)      Theoretical spreading rate (m <sup>2</sup> /l)
	80	114      8,8
	100	142      7,0
	150	214      4,7

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.

**Drying time, +23°C / 50% RH (dry film 80 µm)**

- dust free (ISO 9117-3:2010)	after 1 h
- touch dry (ISO 9117-5:2012)	after 5 h
- fully cured	after 7 days

**Overcoatable, 50% RH (dry film 80 µm)**

surface temperature	by itself, structures in ATMOSPHERIC exposure		by itself, SUBMERGED structures	
	min.	max.*	min.	max.*
<b>+10°C</b>	after 16 h	after 2 months	after 36 h	after 7 days
<b>+23°C</b>	after 5 h	after 1 month	after 16 h	after 7 days

\* 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.

<b>Thinner, clean up</b>	TEKNOSOLV 9506
<b>Finish</b>	Semigloss
<b>Colours</b>	Can be adjusted individually for customers by agreement.
<b>SAFETY MARKINGS</b>	See Safety Data Sheet.

**PTO**

**DIRECTION FOR USE****Surface preparation**

Remove from the surfaces any contaminants that might be detrimental to surface preparation and painting. 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.

**ZINC SURFACES:** Hot-dip-galvanized steel structures that are exposed to atmospheric corrosion can be painted if the surfaces are sweep blast-cleaned (SaS) till matt all over. Suitable cleaning agents are, e.g. aluminium oxide and natural sand. It is not recommended according to standard ISO 12944-5 to paint hot-dip-galvanized objects that are subjected to immersion strain. Painting of hot-dip-galvanized objects that are subjected to immersion strain must be discussed separately with Teknos.

**ALUMINIUM SURFACES:** Treat the surfaces with RENSA STEEL washing agent for galvanized surfaces. Surfaces that are exposed to weathering are also roughened up with sweep blast-cleaning (AlSaS) or sanding.

**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.

**Prefabrication primer**

KORRO E Epoxy, KORRO SE Zinc Epoxy and KORRO SS Zinc Silicate Prefabrication Primers can be used, when required.

**Mixing of the components**

Take into consideration the pot life of the mixture when estimating the amount to be mixed at a time. Before painting 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.

**Application conditions**

The surface to be painted must be dry. During the application and drying period the temperature of the ambient air, the surface and the paint shall be above +10°C and the relative air humidity below 80%. Additionally the temperature of the surface to be painted and the paint must be at least 3°C above the dew point of the ambient air.

NOTE! TEKNOPLAST HS 150 A must not be used in the same paint system with EPITAR or TEKNOTAR 100.

**Application**

Before use stir the paint thoroughly.

If needed, thin the paint 1 - 5 % by TEKNOSOLV 9506.

Apply by brush or airless spray. Use airless spray nozzle size 0,013 - 0,021".

When twin-feed spray is used for application, the ratio of the dosage pump must be 4:1. The feed pump pressure and the consumption of components is to be checked during application to ensure the correct mixing ratio. The components cannot be thinned if twin-feed spray is used.

**ADDITIONAL INFORMATION**

The storage stability is shown on the label. Store in a cool place and in tightly closed containers.

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

The information of this data sheet is normative and based on laboratory tests and practical experience. Teknos guarantees that the product quality conforms to our quality system. Teknos accepts, however, no liability for the actual application work, as this is to a great extent dependent on the conditions during handling and application. Teknos accepts no liability for any damage resulting from misapplication of the product. 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 data sheets, material safety data sheets and system sheets are on our home pages [www.teknos.com](http://www.teknos.com).



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