

# TEKNOPLAST HS 150 EPOXY SYSTEMS WITH LOW SOLVENT CONTENT

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# K58

	L	M	H
C2	O	O	
C3	O		Zn
C4		Zn	Zn
C5	Zn	Zn	Zn

Coating systems for anti-corrosive painting on steel and zinc surfaces. The high solid content TEKNOPLAST HS 150 epoxy paint is used in the systems.

## STEEL SURFACES:

Teknos Coating System Symbol	K58a	K58b	K58c	K58d	K58e	K58j
EN ISO 12944-5 (2007) symbol / corrosivity category / durability range	A2.07/C2/H A3.08/C3/M	A3.09/C3/H	A4.09/C4/H	A5I.03/C5-I/M A5M.01/C5-M/M	A5I.02/C5-I/H A5M.02/C5-M/H	A4.08/C4/M
EN ISO 12944-5 (1998) symbol / corrosivity category/ durability range	S2.16/C2/H S3.17/C3/M	S3.18/C3/H S4.12/C4/L S7.02/C5-M/L	S4.14/C4/M S6.03/C5-I/H	S7.03/C5-M/M	S4.23/C4/H S6.04/C5-I/H S7.04/C5-M/H	S3.19/C3/H S4.13/C4/M
The coating system structure:	EP160/2- FeSa 2½	EP200/2- FeSa 2½	EP280/3- FeSa 2½	EP300/2- FeSa 2½	EP320/3- FeSa 2½	EP240/3 FeSa 2½
TEKNOPLAST PRIMER 7 Epoxy Primer	1 x 80 µm	1 x 80 µm	1 x 80 µm	1 x 150 µm	1 x 80 µm	1 x 80 µm
TEKNOPLAST PRIMER 7 Epoxy Primer	-	-	1 x 100 µm	-	1 x 120 µm	1 x 80 µm
TEKNOPLAST HS 150 Epoxy Paint	1 x 80 µm	1 x 120 µm	1 x 100 µm	1 x 150 µm	1 x 120 µm	1 x 80 µm
Total film thickness	160 µm	200 µm	280 µm	300 µm	320 µm	240 µm
Coating system VOC, g/m <sup>2</sup>	69	85	120	130	140	100

## ZINC SURFACES:

Teknos Coating System Symbol	K58f	K58g	K58h	K58i
EN ISO 12944-5 (2007) symbol / corrosivity category / durability range	A7.10/C3/H A7.10/C4/M A7.10/C5-I/L A7.10/C5-M/L	A7.11/C4/H A7.11/C5-I/M A7.11/C5-M/M	A7.12/C4/H A7.12/C5-I/M A7.12/C5-M/M	A7.13/C5-I/H A7.13/C5-M/H
EN ISO 12944-5 (1998) symbol / corrosivity category/ durability range	S9.10/C3/H S9.10/C4/M S9.10/C5-I/L S9.10/C5-M/L	S9.11/C4/H S9.11/C5-I/L S9.11/C5-M/M	S9.12/C4/H S9.12/C5-I/M C9.12/C5-M/H	S9.13/C4/H S9.13/C5-I/M S9.13/C5-M/H
The coating system structure:	EP120/2- ZnSaS	EP160/2- ZnSaS	EP240/3- ZnSaS	EP320/3 ZnSaS
TEKNOPLAST PRIMER 7 Epoxy Primer	1 x 60 µm	1 x 80 µm	2 x 80 µm	1 x 80 µm
TEKNOPLAST HS 150 Epoxy Paint	1 x 60 µm	1 x 80 µm	1 x 80 µm	2 x 120 µm
Total film thickness	120 µm	160 µm	240 µm	320 µm
Coating system VOC, g/m <sup>2</sup>	51	69	100	140

Example of the coating system marking: K58a - EN ISO 12944-5/A2.07(EP160/2- FeSa 2½).

**USAGE**

Protection for steel and zinc surfaces exposed to atmospheric corrosion.

<b>Teknos symbol</b>	<b>Typical use</b>
<b>STEEL SURFACES:</b>	
K58a	Protection for steel structures in corrosivity categories C2 and C3.
K58b	Protection for steel structures in corrosivity category C3.
K58c	Protection for steel structures in corrosivity category C4.
K58d	Protection for steel structures in corrosivity category C5. Also system (S6.14) in accordance with standard SFS 5873 in corrosivity category C5.
K58e	Protection for steel structures in corrosivity categories C4 and C5.
K58j	Protection for steel structures in corrosivity category C4.
<b>ZINC SURFACES:</b>	
K58f	Hot-dip-galvanized surfaces outdoors in corrosivity categories C3, C4 and C5.
K58g	Hot-dip-galvanized surfaces outdoors in corrosivity categories C4 and C5.
K58h	Hot-dip-galvanized surfaces outdoors in corrosivity categories C4 and C5.
K58i	Hot-dip-galvanized surfaces outdoors in corrosivity categories C4 and C5.

**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 to paint galvanized objects that are subjected to immersion strain.

**Aluminium surfaces:** Treat the surfaces with PELTIPESU cleaning agent. Surfaces that are exposed to weathering are also roughened up with sweep blast-cleaning (AlSaS) or sanding.

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**

The coating systems are compatible with KORRO E Epoxy Prefabrication Primer, KORRO SE Zinc Epoxy Prefabrication Primer and KORRO SS Zinc Silicate Prefabrication Primer.

**Continues**

**Application** Stir the components thoroughly before use. Mix the Base and Hardener carefully with each other in the proportions given on the label. Mix only an amount sufficient to be used within the pot life of the mixture.

Apply preferably by airless spray, since only this method provides the recommended film thickness in a single operation. The temperature of the air and the surface as well as the relative air humidity during the application and drying period must conform to the figures given in the table. Higher temperatures speed up the drying process. The surface must be dry and free from dust.

The technical data of the paint is given in the table below and in the data sheet of the product.

**Maintenance** **Touch-up:** Surfaces with rust grades Ri 1 to Ri 3 can be repaired by touching up. Remove flaking paint and rust from damaged areas by scraping and blast-cleaning. Extend the preparation over the damaged edges into the intact coating. If required, feather the edges of prepared areas. Touch up the prepared patches with the paint of the system to the original film thickness.

**Complete renewal:** Surfaces with rust grade Ri 4 are to be repainted completely, since the coating has lost its protective power. Blast-clean the whole surface to grade Sa 2½ and paint from priming to top coat as for new work.

### Technical Data

Paint		TEKNOPLAST PRIMER 7	TEKNOPLAST HS 150		
Data Sheet	No.	956	113		
Paint Type		epoxy primer	epoxy paint		
Colours		grey, red and white	Teknomix-tinting system		
Finish		semi-matt	semigloss		
Thinner		TEKNOSOLV 9506	TEKNOSOLV 9506		
Methods of application		airless spray	airless spray, brush		
Airless spray nozzle		0,013 - 0,019"	0.013 - 0.021"		
Application conditions					
- min. temperature	°C	+10	+10		
- max. relative humidity	%	80	80		
Safety markings		See Safety Data Sheet	See Safety Data Sheet		
Volume solids	%	70 ±2 (ISO 3233:1988)	70 ±2 (ISO 3233:1988)		
Total mass of solids	g/l	abt. 300	abt. 1050		
Volatile organic compound (VOC)	g/l	abt. 1200	abt. 300		
Recommended film thickness					
- wet	µm	85 - 214	85 - 214		
- dry	µm	60 - 150	60 - 150		
Theoretical spreading rate	m <sup>2</sup> /l	8.8 – 4.7	11.7 – 4.7		
Drying time, +23 °C / 50 % RH		(dry film 80 µm)	(dry film 80 µm)		
- dust free (ISO 9117-3:2010)		after 1 h	after 30 min		
- touch dry (DIN 53150:1995)		after 4 h	after 5 h		
- fully cured		-	after 7 d		
Overcoatable, 50% RH		by itself or with TEKNOPLAST 150:	by itself:		
		min.	max.*	min.	max.*
	<b>+10 °C</b>	after 8 h	after 6 months	after 16 h	after 2 months
	<b>+23 °C</b>	after 4 h	after 6 months	after 5 h	after 1 month

\*Maximum overcoating interval without roughening.