

# TEKNODUR 3410 POLYURETHANE SYSTEMS WITH LOW SOLVENT CONTENT

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# K65

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

Coating systems for steel and zinc surfaces that will be exposed to atmospheric corrosion. The systems consist of high solid content TEKNOPLAST PRIMER 7 Epoxy Primer and TEKNODUR 3410 Polyurethane Top Coat.

## STEEL SURFACES:

Teknos Coating System Symbol	K65a	K65b	K65c	K65d
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.02/C5-I/H A5M.02/C5-M/H
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/H S6.03/C5-I/H	S4.15/C4/H S6.04/C5-I/H S7.04/C5-M/H
The coating system structure:	EPPUR160/2- FeSa 2½	EPPUR200/3 FeSa 2½	EPPUR280/3- FeSa 2½	EPPUR320/4- FeSa 2½
TEKNOPLAST PRIMER 7 Epoxy Primer	1 x 80 µm	1 x 80 µm	1 x 80 µm	1 x 80 µm
TEKNOPLAST PRIMER 7 Epoxy Primer	-	1 x 60 µm	1 x 120 µm	2 x 80 µm
TEKNODUR 3410 Polyurethane Top Coat	1 x 80 µm	1 x 60 µm	1 x 80 µm	1 x 80 µm
Total film thickness	160 µm	200 µm	280 µm	320 µm
Coating system VOC, g/m <sup>2</sup> with TEKNODUR 3410-09 Polyurethane Top Coat	81	95	132	138

## ZINC SURFACES:

Teknos Coating System Symbol	K65e	K65f	K65g
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
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 S9.12/C5-M/H
The coating system structure:	EPPUR120/2- ZnSaS	EPPUR160/2- ZnSaS	EPPUR240/3- ZnSaS
TEKNOPLAST PRIMER 7 Epoxy Primer	1 x 60 µm	1 x 80 µm	2 x 80 µm
TEKNODUR 3410 Polyurethane Top Coat	1 x 60 µm	1 x 80 µm	1 x 80 µm
Total film thickness	120 µm	160 µm	240 µm
Coating system VOC, g/m <sup>2</sup>	61	81	115

Example of the coating system marking: K65a - EN ISO 12944-5/ A2.07 (EPPUR160/2-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>	
K65a	Protection for steel structures in corrosivity categories C2 and C3.
K65b	Protection for steel structures in corrosivity category C3.
K65c	Protection for steel structures in corrosivity categories C3 and C4.
K65d	Protection for steel structures in corrosivity categories C4 and C5.
<b>ZINC SURFACES:</b>	
K65e	Hot-dip-galvanized surfaces outdoors in corrosivity categories C3, C4 and C5.
K65f	Hot-dip-galvanized surfaces outdoors in corrosivity categories C4 and C5.
K65g	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 grade 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	TEKNODUR 3410	
Data Sheet	No.	956	993	
Paint Type		epoxy primer	polyurethane top Coat	
Colours		grey, red and white	by agreement	
Finish		semi-matt	TEKNODUR 3410-05: semigloss TEKNODUR 3410-09: gloss	
Thinner		TEKNOSOLV 9506	TEKNOSOLV 9526	
Methods of application		airless spray	airless spray	
Airless spray nozzle		0.013 - 0.019"	0.013 - 0.015"	
Application conditions				
- min. temperature	°C	+10	+5	
- max. relative humidity	%	80	80	
Safety markings		See Material Safety Data Sheet	See Material Safety Data Sheet	
Volume solids	%	70 ±2 (ISO 3233:1988)	TEKNODUR 3410-05: 63 ±2 TEKNODUR 3410-09: 60 ±2	
Total mass of solids	g/l	abt. 1200	TEKNODUR 3410-05: abt. 980 TEKNODUR 3410-09: abt. 930	
Volatile organic compound (VOC)	g/l	abt. 300	TEKNODUR 3410-05: abt. 330 TEKNODUR 3410-09: abt. 350	
Recommended film thickness			TEKNODUR 3410-09	
- wet	µm	85 - 171	100 - 133	
- dry	µm	60 - 120	60 - 80	
Theoretical spreading rate	m <sup>2</sup> /l	11.7 - 5.8	10.0 - 8.1	
Drying time, +23°C / 50 % RH		(dry film 80 µm)	(dry film 60 µm)	
- dust free (ISO 9117-3:2010)		after 1 h	after 40 min.	
- touch dry (DIN 53150:1995)		after 4 h	after 6 h	
- fully cured		-	after 7 d	
Overcoatable, 50% RH		by itself:	by itself:	
		min.	max.*	min.
				max.*
	+5°C	-	-	after 20 h
	+10°C	after 8 h	after 6 months	-
	+23°C	after 4 h	after 6 months	after 12 h
		with TEKNODUR 3410		-
		min.	max.*	
	+10°C	after 12 h	after 7 d	
	+23°C	after 4 h	after 3 d	

\*Maximum overcoating interval without roughening.