

INERTA MASTIC SYSTEMS (STANDARD SFS 5873)

K56

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Coating systems for maintenance and touch-up painting of steel surfaces. The systems are used when environmental conditions do not allow blast-cleaning of the surface. The primer has good adhesion to wire-brushed steel and it provides a dense and thick paint coat in one application. The paint can also be used alone without a top coat. Suitable top coats are epoxy and polyurethane paints.

Teknos Coating System Symbol	K56a	K56b	K56c	K56d	K56e
SFS 5873, symbol/ corrosivity category	R25.06/C3	R25.07/C4	R25.08/C4	R25.09/C5	R25.10/C5
The coating system structure:	EP160/2-FeSt 2	EPPUR240/3-FeSt 2	EP240/3-FeSt 2	EPPUR280/3-FeSt 2	EP300/2-FeSt 2
INERTA MASTIC Epoxy Coating	1 x 100 µm	1 x 100 µm	2 x 80 µm	2 x 120 µm	1 x 150 µm
TEKNOPLAST PRIMER 3 Epoxy Primer	-	1 x 100 µm	-	-	-
TEKNOPLAST 50 Epoxy Top Coat	-	-	1 x 80 µm	-	-
TEKNOPLAST HS 150 Epoxy Paint	1 x 60 µm	-	-	-	1 x 150 µm
TEKNODUR 0050 Polyurethane Top Coat	-	1 x 40 µm	-	1 x 40 µm	-
Total film thickness	160 µm	240 µm	240 µm	280 µm	300 µm
Coating system VOC, g/m ²	52	140	110	90	100

Example of the coating system marking: K56a - EP160/2-FeSt 2.

USAGE Protection for wire-brushed steel surfaces exposed to atmospheric corrosion.

Teknos symbol	Typical use
K56a	Maintenance painting system (R25.06) in accordance with standard SFS 5873 for corrosivity category C3.
K56b	Maintenance painting system (R25.07) in accordance with standard SFS 5873 for corrosivity category C4.
K56c	Maintenance painting system (R25.08) in accordance with standard SFS 5873 for corrosivity category C4.
K56d	Maintenance painting system (R25.09) in accordance with standard SFS 5873 for corrosivity category C5.
K56e	Maintenance painting system (R25.10) in accordance with standard SFS 5873 for corrosivity category 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:

Painted surfaces: 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.

Exposed steel surfaces are cleaned from rust to preparation grade St 2 (ISO 8501-1).

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.

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

Apply the primer with a brush or roller and smooth the surface with brush. To blast-cleaned surfaces it can also be applied by airless spray. The top coats are applied by brush, to large surfaces by airless spray. 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 below. Higher temperatures speed up the drying process. The surface must be dry and free from dust.

The technical data of the paints are given in the table below and in the data sheets of the products.

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 wire-brushing or blast-cleaning. Extend the preparation over the edges of damaged parts into the intact coating. Touch up the prepared patches with the paints of the system to the original film thickness.

Complete renewal: When the surface rust grade is Ri 4 the maintenance painting is done as a renewal painting. Blast-clean the whole surface to grade Sa 2½ and renew the paint from start.

Technical Data

Paint	INERTA MASTIC	TEKNOPLAST PRIMER 3	TEKNOPLAST 50	TEKNOPLAST HS 150	TEKNODUR 0050					
Data Sheet no.	212	442	443	113	682					
Paint Type	epoxy coating	epoxy primer	epoxy top coat	epoxy paint	polyurethane top coat					
Colours	aluminium	red, yellow, grey and white	Teknomix tinting	Teknomix tinting	Teknomix tinting					
Finish	semi-matt	semi-matt	semigloss	semigloss	semigloss					
Thinner	TEKNOSOLV 9506	TEKNOSOLV 9506	TEKNOSOLV 9506	TEKNOSOLV 9506	TEKNOSOLV 9521, TEKNOSOLV 6220					
Methods of application	brush, roller	airless spray	airless spray	airless spray, brush	airless spray					
Airless spray nozzle	-	0.013 - 0.019"	0.013 - 0.019"	0.013 - 0.021"	0.011 - 0.013"					
Application conditions - min. temperature °C - max. relative humidity %	+10 80	+10 80	+10 80	+10 80	+5 80					
Safety markings	See Safety Data Sheet	See Safety Data Sheet	See Safety Data Sheet	See Safety Data Sheet	See Safety Data Sheet					
Volume solids%	80 ±2	53 ±2	53 ±2	70 ±2 (ISO 3233:1988)	56 ±2 (ISO 3233:1988)					
Total mass of solids g/l	abt. 1200	abt. 910	abt. 800	abt. 1050	abt. 870					
Volatile organic compound (VOC) g/l	abt. 210	abt. 440	abt. 430	abt. 300	abt. 430					
Recommended film thickness - wet µm - dry µm	100 - 187 80 - 150	190 100	150 80	85 - 214 60 - 150	71 40					
Theoretical spreading rate m ² /l	10.0 - 5.3	5.3	6.6	11.7 - 4.7	14.0					
Drying time at +23°C / 50% RH - dust free, (ISO 9117-3:2010) - touch dry, (DIN 53150:1995) - fully cured Overcoatable, 50% RH	(dry film 120 µm) after 4 h after 6 h - by itself, TEKNOPLAST paints or TEKNODUR paints:	(dry film 60 µm) after 1 h after 4 h - by itself or TEKNOPLAST paints:	(dry film 60 µm) after 1 h after 4 h - by itself:	(dry film 80 µm) after 30 min after 5 h after 7 d by itself:	(dry film 40 µm) after 1 h after 6 h - by itself:					
	min.	max.*	min.	max.*	min.	max.*	min.	max.*	min.	max.*
+5°C	-	-	-	-	-	-	-	-	after 20 h	-
+10°C	after 1 d	after 7 d	after 6 h	after 6 months	after 6 h	after 1 month	after 16 h	after 2 months	-	-
+23°C	after 6 h	after 7 d	after 2 h	after 6 months	after 2 h	after 1 month	after 5 h	after 1 month	after 12 h	-
+10°C			with TEKNODUR Top Coats							
			min.	max.*						
			after 12 h	after 7 d						
+23°C			after 4 h	after 3 d						

* Maximum overcoating interval without roughening.