

TEKNOHEAT 500-100 CS

Modified silicone paint

TEKNOHEAT 500-100 CS is one component paint resistant to continuous action of temperature up to +650°C, not required initial heating, contains active anticorrosion pigments.



The paint is used as a single layer protection of steel elements exposed to high temperature (up to +650°C), or as a topcoat for steel construction primed with ethyl zinc silicate (eg. Teknozinc ESI 3180) exposed in temperature up to +500°C.

Silvery, quick drying, mat coating give an anticorrosive protection for steel elements in C3H/C4M corrosion environment (dry coating thickness min. 90 µm). In more than C3H/C4M anticorrosion environment is recommended to use in system with ethyl zinc silicate paint.



TECHNICAL DATA

Fields of application	Steel constructions									
Recommended substrate	Steel									
Binder	Silicone aluminium									
Solids	45±2% by volume (ISO 3233)									
Total mass of solids	Approx. 790 g/l									
Volatile organic compound (VOC)	Approx. 500 g/l (DIRECTIVE 2010/75/EU) The VOC value provided is the average value for factory produced products, and consequently it will be subject to variations between individual products covered by this Technical Data Sheet.									
Theoretical spreading rate	<table border="1"><thead><tr><th>Dry film (µm)</th><th>Wet film (µm)</th><th>Theoretical spreading rate (m²/l)</th></tr></thead><tbody><tr><td>60</td><td>133</td><td>7.5</td></tr><tr><td>80</td><td>178</td><td>5.6</td></tr></tbody></table> <p>As many of the paint's properties will change if too thick coats are applied, it is recommended to applied a total coating thickness not more than 120 (µm). Higher coating thickness may cause blistering influenced by temperature.</p>	Dry film (µm)	Wet film (µm)	Theoretical spreading rate (m ² /l)	60	133	7.5	80	178	5.6
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Practical spreading rate	The values depend on the application technique, surface conditions, overspray, etc.									
Colours	TO-850 aluminium									
Gloss (60°)	Matt									
Thinner	TEKNOSOLV 1639									

Storage

The storage stability is shown on the label. Must be stored tightly closed and kept cool and dry.

DIRECTION FOR USE**Surface preparation**

Before cleaning of surface, it is recommended to wash it with water with addition of OLICLEAN 123 and then rinse with fresh water. Remove from the surfaces any contaminants that might be detrimental to surface preparation and application.

Steel surface cleaned to the degree of cleanliness at least Sa 2½ according to ISO 8501-1.

In case of amendment after assembly or to correct small defects of layer it is allowed to repaint it with TEKNOHEAT 500-100 CS but the surface must be cleaned to PSt3 degree. In that cases, well adhered paint surface should be intact.

The surface prepared for repainting must be free from oil, grease, dust, mill scale and pure adhering rust, old paint surface and other contaminants or impurities.

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

Application method

Airless spraying, Conventional spraying, Brush

Application

Stir thoroughly before use.

Apply by airless spray, air spray or brush.

Suitable airless nozzle size 0.009 - 0.013"

Nozzle pressure 10-15 MPa.

In case when paint is applied on ethyl zinc silicate coat it is recommended 25% dilution of TEKNOSOLV 1639 and application the first layer in thickness not more than 30µm (wet film).

Application conditions

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 +5°C and the relative air humidity below 80%. 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.

Drying time	+23 °C / 50% RH (dry film 80 µm)
- dust free	45 min
- touch dry	2 h

Overcoatable	Surface temperature	By itself	
		Min.	Max.
	+5 °C	4h	unlimited
	+10 °C	3h	unlimited
	+23 °C	2h	unlimited

Given times relates to the recommended coating thickness, drying in good ventilation conditions. These times may change with a change of temperature, ventilation, number of layers and the thickness of the coating. Increase in film thickness and rise in the relative humidity of the air in the drying space usually slow down the drying process. Regardless of the number of layers, the total thickness of the dry film of TEKNOHEAT 500-100 CS cannot exceed 120µm.

Cleaning TEKNO SOLV 1639

HEALTH AND SAFETY

Safety and precaution measures See safety data sheet.

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