

# TEKNOHEAT 500

## Silicone paint

TEKNOHEAT 500 is a silicone paint that withstands high temperatures.

Used as a top coat in zinc silicate/silicone systems on hot surfaces indoors and outdoors, e.g. flues, stoves, oven doors and exhaust pipes. Steel surfaces that are temporarily damp must be primed with appropriate anticorrosive zinc dust paints.

The paint forms a film that withstands permanent heat up to +200°C - +400°C depending on the colour (see section Colours). Colours which are used in +400°C can momentary withstand heat up to +500°C. Aluminium colour (RAL-9006) withstands heat up to +650°C.



## TECHNICAL DATA

<b>Recommended substrate</b>	Steel						
<b>Binder</b>	Silicone						
<b>Solids</b>	25 ±2% by volume						
<b>Total mass of solids</b>	Approx. 450 g/l						
<b>Volatile organic compound (VOC)</b>	Approx. 645 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.						
<b>Theoretical spreading rate</b>	<table border="1"><thead><tr><th>Dry film (µm)</th><th>Wet film (µm)</th><th>Theoretical spreading rate (m<sup>2</sup>/l)</th></tr></thead><tbody><tr><td>15</td><td>60</td><td>16.7</td></tr></tbody></table> <p>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.</p>	Dry film (µm)	Wet film (µm)	Theoretical spreading rate (m <sup>2</sup> /l)	15	60	16.7
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<b>Practical spreading rate</b>	The values depend on the application technique, surface conditions, overspray, etc.						
<b>Colours</b>	+200°C: RAL-1011, RAL-2001, RAL-3011, RAL-6005, RAL-8017 +400°C: RAL-3009, RAL-7016, RAL-7021, RAL-7024, RAL-9005, RAL-9007 +650°C: RAL-9006						
<b>Tinting system</b>	Teknotint						
<b>Gloss (60°)</b>	Matt						
<b>Thinner</b>	TEKNOSOLV 9502, TEKNOSOLV 1639.						
<b>Storage</b>	Must be stored tightly closed and kept cool and dry.						

## DIRECTION FOR USE

<b>Surface preparation</b>	<p>THIN-PLATE SURFACES: Brush corroded areas carefully and remove all grease and dirt by washing the surfaces e.g. with RENSA STEEL washing agent for galvanized surfaces.</p> <p>STEEL SURFACES: Remove mill scale and rust by blast cleaning to preparation grade Sa 2½ (standard ISO 8501-1).</p> <p>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.</p> <p>Additional instructive information for surface preparation can be found in standards EN ISO 12944-4 and ISO 8501-2.</p> <p>Prefabrication primer: KORRO SS zinc silicate prefabrication primer can be used, when required.</p>		
<b>Application method</b>	Airless spraying, Conventional spraying, Brush, Roller		
<b>Application</b>	Stir thoroughly before use. Suitable airless nozzle size 0.013 - 0.017"		
<b>Application conditions</b>	<p>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%. The temperature of the surface to be painted must not be above +50°C. 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.</p>		
<b>Drying time</b>	+23°C / 50% RH (dry film 15 µm)		
<b>- dust free</b>	10 min (ISO 9117-3:2010)		
<b>- touch dry</b>	20 min (ISO 9117-5:2012)		
<b>- through dry</b>	30 min (ISO 9117-1:2009)		
	<p>The paint film obtains the final hardness when it is dried for added 2 hours at min +200°C.</p> <p>NOTE! When the paint film is for the first time heated to more than +200°C, acrid combustion gases are formed in the hardening process. Take then care of good ventilation.</p>		
<b>Overcoatable</b>	<table border="1"><thead><tr><th>by itself</th></tr></thead><tbody><tr><td>Before a new coat is applied the first coat must be heated to the operating temperature: minimum of +200°C for 2 h.</td></tr></tbody></table> <p>Increase in film thickness and rise in the relative humidity of the air in the drying space usually slow down the drying process.</p>	by itself	Before a new coat is applied the first coat must be heated to the operating temperature: minimum of +200°C for 2 h.
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<b>Cleaning</b>	TEKNOSOLV 9502 or TEKNOSOLV 1639.		

## HEALTH AND SAFETY

### Safety and precaution measures

See safety data sheet.

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