

## TECHNICAL DATA SHEET

### 2K Thermoresist HSR ECO 1000

*Air-drying, two component, high solid, silicone based heat resistant paint*

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| <b>Colours:</b>                                  | According to the colour chart   |
| <b>Field of application:</b>                     | Developed for the aesthetic coating of metal substrates exposed to high temperatures for long periods of time (stoves, chimneys, grills, furnaces, fireplaces, exhausters, smoke-pipes, heat-technology equipment, electronic industrial and domestic machines, etc.) |
| <b>Appearance:</b>                               | <b>A</b> component: Homogenous suspension<br><b>B</b> component: pale yellow liquid   |
| <b>Rel. Density: (23°C):</b>                     | <b>A</b> component: 1,2-1,4 g/cm <sup>3</sup><br><b>B</b> component: 0,99-1,00 g/cm <sup>3</sup>  |
| <b>Non-volatile content:<br/>(180°C/30 min):</b> | <b>A</b> component: min. 70 m/m%  |
| <b>Efflux time (DIN4, 23°C):</b>                 | min. 13 s   |
| <b>Mass mixing ratio:</b>                        | <b>A:B 12:1 or 24:1</b> The applicable ratio is indicated on the label of the paint.<br><br>Application process can be start 20-30 minutes after the homogenization of the components.  |
| <b>Shelf life:</b>                               | 6 months from production if stored between +5 and +25°C.  |

#### **PROPERTIES AND APPLICATION INSTRUCTIONS (MIXTURE)**

|                               |  |
|-------------------------------|--|
| <b>Substrates:</b>            | Cold- or hot rolled steel, cast iron   |
| <b>Surface pre-treatment:</b> | Substrates must be clean, dry and free from any contamination. All oil, dirt, grease, dust, foreign material and oxide layer must be removed prior to coating. Blast cleaning with rough blasting particles highly improves adhesion. Abrasive blast clean to Sa 2½ (ISO 8501-1:2007). |

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|--------------------------------|---|
| <b>Processing:</b>             | Conventional low-pressure, high-pressure and HVLP atomization, or electrostatically, By conventional air spray 0,5-0,9 mm nozzle and 2,5-4 bar atomizing pressure is advised.   |
| <b>Drying and cure:</b>        | <p>Coating reaches ready-to-touch drying stage (25 µm DFT, 50% RH) at 25°C in 30-60 minutes (but it remains sensitive to scratch).</p> <p>We recommend forced drying for 30 minutes at 80°C.</p> <p>Higher curing temperature increase the layer hardness and decrease the drying time.</p> <p>The coating was dried at less than 80°C reaches its optimum resistance properties after the next 48 hours otherwise after the next 24 hours. Only after this can the coated surface be exposed to higher temperatures, applying an even rate of heating.</p> |
| <b>Rec. layer thickness:</b>   | 40-50 µm wet / 20-25 µm dry   |
| <b>Adhesion:</b>               | 0 grade (on blasted steel)  |
| <b>Heat resistance:</b>        | maximum 600°C (slight loss of gloss is acceptable)  |
| <b>Theor. spreading rate:</b>  | 18 m <sup>2</sup> /kg 25 µm DFT   |
| <b>Thinning:</b>               | not necessary   |
| <b>Clean up:</b>               | Tools and surfaces contaminated with paint can be cleaned with some organic solvent (e.g. aromatic thinner).  |
| <b>Storage &amp; Pot life:</b> | Material - stored in a dry, shaded environment away from heat, frost & ignition sources – remain usable for 1 week.   |
| <b>Safety precautions:</b>     | This paint is for use only by professional applicators in accordance with information in this Technical Data Sheet and the applicable Material Safety Data Sheet (MSDS). Refer to the product MSDS before using this material.  |

*We recommend the field of application and usage technologies according to our best technical knowledge. These recommendations do not substitute for the detailed application technology / method statement which has to be developed with respect to the local circumstances and application requirements. In this sense this TDS should be considered as information only.*