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| Product name   | Unit                              | SÄKAPHEN® Si 57® EG   |
|--|-----------------------------------|---|
| Properties   | -                                 | Heat Cured Duroplast Coating  |
| Resin base   | -                                 | Phenolic epoxy resin blend  |
| Field of Application   | -                                 | For coating of heat exchangers, air coolers, condensers and evaporators, housings of turbo machinery, uninsulated tanks and process tanks, condensate tanks, desalination, thermal degasifiers and pipelines. Especially suitable for plant parts that are exposed to hot water and steam in slightly sour to alkaline environment. The coating is resistant to water vapour diffusion. |
| Cure Mechanism   | -                                 | Heat cured  |
| Quantity of components   | -                                 | 1   |
| Color  | -                                 | Brown   |
| Surface  | -                                 | Matt  |
| General chemical resistance<br>(All resistances have to be inquired separately!) | -                                 | Diffusion resistance and chemically resistant to various substances from aqueous alkaline to weak acidic media and vapours of all types of cooling waters including brackish, river and sea water.  |
| pH Range   | pH                                | 4 - 13  |
| Wet Film Thickness per layer   | µm                                | 100   |
| Total dry film thickness   | µm                                | 250   |
| Coverage   | approx.<br>kg/m <sup>2</sup> /DFT | 1,4 kg / m <sup>2</sup> / 250µm   |
| Surface Preparation  | Sa                                | SA2 ½ - SA 3  |
| Surface Profile  | µm                                | 40 - 60 µm  |
| Temperature resistance dry<br>(dry air oven)                                     | °C                                | -20°C to +180°C/200°C   |
| Temperature resistance wet<br>(water)  | °C                                | -20°C to +180°C/200°C   |
| Resistance to water vapor diffusion  | °C                                | ≤ ΔT 85°C   |
| Overcoating Waiting Time   | hours/23°C                        | no limitations  |
| Chemical Curing  | days                              | after final bake  |
| Linear Thermal Expansion   | µm                                | (VDE 0304): 34*10-6 mm/mm°C   |
| Pore testing   | Volts                             | 67,5  |
| Pendulum hardness acc. to König  | 6° sec                            | 112   |
| Shore D Hardness   | Shore D                           | 94  |
| Adhesion Test  | N/mm <sup>2</sup> [MPa]           | > 20  |
| Salt spray test  | hours                             | under examination   |
| Impact Strength  | mm (1 kg)                         | > 1000  |
| Surface smoothness (Ra)  | µm<br>Ø 3 readings                | 1,95  |
| Surface tension  | mN/m                              | n/a   |
| Taber Abrasion resistance  | CS17, 1kg load<br>mg/1000r.       | n/a   |
| Crosscut   | class                             | 0   |
| Heat conductivity<br>Ø 12,7x2,0mm on C-Steel with 67,37<br>w/mK                  | W/mK                              | 3,12  |