

All recommendations contained herein are correct to the best of our knowledge. We do, however, not bear any responsibility for the accuracy of the contents. No part of this document may be reproduced without the prior permission of SÄKAPHEN GmbH, Bottroper Straße 275, 45964 Gladbeck/Germany.

Product name	Unit	SÄKAPHEN® Si 57® EL
Properties	-	Heat Cured Duroplast Coating
Resin base	-	Phenolic epoxy resin blend
Field of Application	-	Optimized for the application on finned air coolers. Due a particular low viscosity finned air coolers with a fin pitch from 1,5mm upwards can be protected.
Cure Mechanism	-	Heat cured
Quantity of components	-	1
Color	-	Dark Brown
Surface	-	Glossy
General chemical resistance (All resistances have to be inquired separately!)	-	Resistant to fumes and mist also in droplets of strong alkaline to weak acidic media, all type of cooling waters brackish, river and sea water as well as deionized water, salt solutions, greases, oils, solvents, gases.
pH Range	pH	3 - 14
Wet Film Thickness per layer	µm	50
Total dry film thickness	µm	30-80
Coverage	approx. kg/m²/DFT	0,4 kg / m² / 80µm
Surface Preparation	Sa	SA2 ½ - SA 3
Surface Profile	µm	40 - 60 µm*
Temperature resistance dry (dry air oven)	°C	-20°C to +180°C/200°C
Temperature resistance wet (water)	°C	-20°C to +180°C/200°C
Resistance to water vapor diffusion	°C	≤ ΔT 30°C
Overcoating Waiting Time	hours/23°C	no limitations
Chemical Curing	days	after final bake
Linear Thermal Expansion	µm	(VDE 0304): 44*10-6 mm/mm°C
Pore testing	Volts	67,5
Pendulum hardness acc. to König	6° sec	200
Shore D Hardness	Shore D	94
Adhesion Test	N/mm² [MPa]	>30
Salt spray test	hours	1400
Impact Strength	mm (1 kg)	> 1000
Surface smoothness (Ra)	µm Ø 3 readings	1,12
Surface tension	mN/m	<28
Taber Abrasion resistance	CS17, 1kg load mg/1000r.	27
Crosscut	class	0
Heat conductivity Ø 12,7x2,0mm on C-Steel with 67,37 w/mK	W/mK	2,51
Comments		*Surface profile on the frame, fins remain untreated.