Technical Datasheet

ROCC Top

Pre-Ceramic Clear Coating

ROCC Top is a unique Pre-Ceramic, PolySiloxazane coating solution. On a correctly prepared substrate, ROCC Top absorbs and adsorbs to a “diffuse inter-phase” which provides integrated surface-functions to the substrate. The cured coating forms a thin, very hard, low-friction layer which smoothens out the irregularities of the surface. ROCC Top is highly wear and corrosion resistant and provides very effective non-stick properties. Due to its pre-ceramic composition, ROCC Top can withstand temperatures above 1200°C. In room temperature (RT), the inorganic portion of ROCC Top needs approx. 5 days to cure to reach its final characteristics. Forced curing with increased temperature (80-200°C) after 2h RT is possible. Cracking Threshold: 30+µm layer.

Typical properties

- High gloss – Non oxidizing
- High corrosion and chemical resistance
- Non-Stick, hydrofobic, low friction
- High Hardness (up to 8H)
- Covalent bonding to clean metal (no primer)
- UV stable
- Low temperature curing
- **High temperature** resistance
- Easy application
- Total free from PFAS

Application examples

- Pipe linings
- Tanks
- Transportation
- Offshore/marine applications
- Corrosion protection steel
- Non-Stick Applications
- Sealing of porous substrates (Cast iron).
- Pumps
- Anti-stain

Application parameters

▪ Cure (25˚C)	To touch	1h
	Hard	4h
	Fully cured	120h
▪ Heat Cure (After 2h)	(80-200°C)	1-2h
▪ Adhesion	(Cross Hatch)	5B
▪ Hardness	Pencil hardness	7-8H
	König DIN 53157	86
▪ Gloss	60˚ angle	82%
▪ Overcoat (25˚C)	Max	15-20min
▪ Solids		50%
▪ Cleaning	Butyl Acetate, Xylene	

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Further Ceramic Explanations:

Pre-Ceramic is the stage of ceramics before they enter the vitrification stage. Either chemical or thermal-Vitrification. Normally, for thermal vitrification, at approx. 600°C, the organic elements burn off, and you introduce the stage of pyrolysis. At first this will show as a yellowing, discoloring sequence and further on it will compose to a true ceramic.

The ROCC Top is a true pre-ceramic and will do just that. The unique formulation of ROCC Top differs by providing its high-level chemical resistance and non-stick properties even Before Pyrolysis or Vitrification. Meaning, ROCC Top provides superior protection over the whole spectrum.

The end product/coating of a ROCC Top system allows the protection of substrates to be intact at temperature levels way above 1200°C. Chemical Resistance is also remarkable.

Due to its non-stick properties the product will improve the ability to avoid bacterial growth on the substrate, where such is not desired, e.g. within food industry.

After curing the material is to be considered as a pure pre-ceramic without any substances that will affect the health of human beings.