

CARAPAX TAR F21 WITH ACTIVATOR AC 430

Moisture curing tar-free polyurethane top coat

Product code SIS CP 00 430TC
TDS-No./-Version: TDS CP 420-EN/02

Revised: 24.05.2015
Issued by: OS

PRODUCT DESCRIPTION

Carapax Tar 21 is a tar-free moisture-curing polyurethane topcoat in combination with micaceous iron. This product is intended for long-term corrosion protection, particularly suitable for hydraulic steel structures.

- » is highly abrasion resistant, chemically resistant and provides a low water and water vapor diffusion.

AREAS OF APPLICATION

Steel water construction (docks, sluice gates, sheet piles), pressure pipes, biogas plants, sewage treatment plants, power plants, shipbuilding industry in Immersion- or underwater application (for a long functional life).

RAW MATERIALS

Binder: moisture curing polyisocyanate
Pigments: filler
Solvents: aromatic hydrocarbons

PRODUCT DATA

PHYSICAL DATA

Density: 1,78 g/cm³
Solids: 82 +/- 2 % (by weight)
64 +/- 2 % (by volume)
VOC: 176 g/l
Viscosity: 120 sec 6 mm / DIN 6
2500 – 3000 mPas (brushing)
Colour: black

THEORETICAL MATERIAL CONSUMPTION

Dry film thickness in µm	Wet film thickness in µm	Consumpt. ca. kg/m ²
150	235	0,399
500	787	1,332

- » The realistic need is about 35 – 50 % above the theoretical consumption, caused by
 - different object geometries (15 – 20 %)
 - spray loss due to application (20 – 30 %).

RESISTANCE TO TEMPERATURE

Continuous temperature stability up to max. 80 °C dry heat, peak temperatures briefly up to max. 100 °C.

SHELF LIFE

At least 6 months when not opened original container at + 5° C to + 30 °C.

When opened the container, cover the remaining material with thinner and close tightly to avoid air contact.

ACTIVATOR / MIXING RATIO

For optimum curing at high layer thicknesses, an activator must be added in the mixing ratio:
15 parts Carapax Tar 21 /
1 part Activator AC 430

PACK SIZES

10,0 kg + Activator AC 430 0,67 kg = 10,67 kg

COATING SYSTEMS

COATING RECOMMENDATION

Prime surfaces either with Carapax Zinc M or Carapax Pi before coating with Carapax Tar 21.

Example:

1 x 60 µm Carapax Zinc M
2 x 150 µm Carapax Tar 21

PROCESSING INSTRUCTIONS

PREPARATION OF SURFACE

- » The substrate must be prepared by sandblasting grade Sa 2 ½ acc. DIN EN ISO 12944, part 4. Coat immediately after blasting. Prime with: Carapax Zinc M oder Carapax PI

MATERIALVORBEREITUNG

Please check the state of the container before opening. Possibly this may be under pressure. In this case, by piercing the lid only reduce the pressure.

The product must be mixed with the activator Carapax AC 430 in a ratio of 15: 1 before processing to ensure optimal curing even at high film thickness.

When opened the containers, cover the remaining material with thinner and tightly closed to avoid contact with air and process within a few days.

APPLICATION CONDITIONS

The material can be applied at a relative humidity from 30 - 98% and outdoor temperatures between -5 °C (ice-free surface) and +40 °C.

PROCESSING METHODS

Method	Thinner	%	Pressure (bar)	Nozzle
Brush/ roller	TH 510	0 – 5 %		
Compr. Air spraying	TH 520	10-20 %	3 – 4	1,5–2.0 mm
Airless-Spraying	TH 520	0 – 5 %	120-150	0,015-0,019" (40-80°) / 0,42-0,53 mm

- » When painting / rolling it is necessary to work with a removal grid in order to achieve a uniform coating thickness.

Quantity of admixture of thinners depends on ambient temperature and processing method.

LAYER THICKNESS

Dry film thickness: 80 - 500 µm
Wet film thickness: 125 - 787 µm

THINNER AND CLEANING

Thinner TH 510 Rolling/Brushing
Thinner TH 520 Spraying

DRYING TIMES

at 150 µm DFT and rel. humidity of 50 %

	Dust dry	Over-coatable	Ready to installation	Hard dry
20 °C	30 min.	45 min.	3 hrs.	3 hrs.

- » **Attention at low temperatures and low humidity: the material dries more slowly and thereby the load or recoatability delayed considerably.**

IMPORTANT NOTES

Please pass on this technical data sheet to the user. All data are based on conscientious laboratory testing and experience. However, a liability or guarantee of certain properties can not be derived and does not release the user from own examinations. With every new edition of the previous product will lose its validity. For questions or queries, please contact our technical application consultants.

All further information on risks and protection measure-taking, please refer to the Material Safety Data Sheet.