

# CARAPAX FERRO

## Moisture curing polyurethane coating

Product code                    SIS CP 00 310IM  
TDS-Code/-Date:                TDS CP 310-EN/02

Updated:                         30.05.2014  
Issued by:                        OS

### PRODUCT DESCRIPTION

Carapax Ferro is a single-component, moisture-curing polyurethane intermediate/ topcoat in combination with micaceous iron oxide.

The special, lamellar structure of the pigment in combination with the polyurethane binding agent enables coatings with excellent resistance to water and corrosion.

### BINDING AGENT

Moisture curing aromatic polyisocyanate

### PIGMENTS

Micaceous iron oxide, colour pigmentation

### SOLVENTS

Ester and aromatic hydrocarbons

### FIELDS OF APPLICATION

Steel constructions, chemical plants, steel water engineering, bridge and mast construction etc.

### SURFACE PRE-TREATMENT:

1. Removal of contaminations:
  - Remove oil and grease residues with solvent or emulsifying agent solutions.
  - Remove salt residues with a brush or by steam vapour
  - The substrate must be clean, free from dust or grease, dry, solid and stable.

- » 2. Mechanical roughening, preparation by sand blasting is desirable up to degree Sa 2 ½
- » 3. Primer:
  - Carapax Zink M or
  - Carapax PI

### COATING RECOMMENDATIONS

- |     |  |
|-----|--|
| 1 x | 60 µm Carapax Zinc M   |
| 2 x | 60 µm Carapax Ferro<br>(or Carapax top coat Cover RAL, Non-Abrasive or TAR 21) |

### APPLICATION METHODS

- » Brushing, rolling, air- and airless-spraying
- » Carapax Ferro can be applied on to vertical surfaces up to 150 µm DFT without sagging.

### APPLICATION CONDITIONS

Relative air humidity:        30 - 98 %

Object temperature:        - 5 °C (ice-free) up to + 50 °C.

### LAYER THICKNESSES

60 - 150 µm TSD

### VISCOSITIES

75 DIN 6

1000 – 1200 mPas (Brushing Viscosity)

### THINNER

Thinner TH 510    Rolling

Thinner TH 520    Spraying

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

### AIR SPRAYING:

Pressure:                    3 - 4 bar

Nozzle:                      1,5 - 2,0 mm

Thinner:                     7 - 12 %

### AIRLESS SPRAYING

Pressure:                    150 - 200 bar

Nozzle:                      0,015 – 0,019 Inch (0,4 - 0,5 mm)

Thinner:                     0 - 2 %

### CLEANING OF EQUIPMENT

Thinner TH 510 or Thinner TH 520

## DRYING

at 20 °C, 60 µm DFT

- » dust dry after: 1 hour
- » fast to handling: 2,5 hours
- » dry to touch after: 6 hours
- » overcoat able after: 6 hours
- » (Spraying) 6 hours at 150 µm DFT

## CORROSION PROTECTION TESTS

\* 2 500 hours salt spray test acc. to DIN 53167

\* 2 500 hours condensation water test acc. to  
DIN 50017

\* 5 000 hours salt water (seawater)

\* 5 000 hours alternating tests:

14 days salt spray test

14 days salt water (seawater)

1 x 60 µm Carapax Zinc M

2 x 60 µm Carapax Ferro

## TEMPERATURE RESISTANCE

+ 120 °C (dry)

## SHELF LIFE

12 months in unopened original can under cool and dry  
storing conditions. Cover opened cans with thinner  
TH 510 or TH 520 and close tightly.

## DENSITY

1,53 g/cm<sup>3</sup>

## SOLIDS:

75 % weight

50 % volume

## MATERIAL CONSUMPTION

Carapax Ferro, 60 µm DFT

- » Theoretically: 175 g/m<sup>2</sup>

The actual need can vary greatly - depending on the  
object geometry and application. The roughness com-  
pensation is not taken into account.

## AVAILABLE IN CANS OF

1 l (ca. 1,4 kg) / 5 l (ca. 9 kg) / 10 l

## COLOUR

According to iron fillings colour cards

- » Carapax Ferro also shows with intense colors an  
excellent color stability

## V.O.C.

323 g/l

## UN-NO.

1263

## RID/ADR/SDR NUMBERS

No product of class 3

## FLASH POINT

+ 30 °C

- » Please pass this data sheet on to the person in charge  
of the coating.

Above data and recommendations are based on exten-  
sive tests and are to be considered only as guidelines  
without any obligations. As we are continuously develop-  
ing and improving our products we recommend to con-  
sider the date of this data sheet and, if necessary, to ask  
if there were any changes in the meantime. In case of  
further questions, please contact one of our technical  
advisors for detailed information.