

# Product data sheet

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## TEFRO<sup>®</sup>cor 310 RP

### 1-component anti-corrosion coating based on silane-terminated prepolymers

#### General system description

TEFRO<sup>®</sup>cor 310 RP is a 1K, environmentally friendly multi-purpose coating for medium corrosion protection applications.

TEFRO<sup>®</sup>cor 310 RP is weather-resistant and can therefore be used without UV-resistant protective coatings.

#### Mechanical properties

- solvent-free
- high impact and abrasion resistance
- temperature-independent
- chemically resistant
- superhydrophobic
- quick drying
- UV-resistant
- roll, brush and spray application
- early water resistant
- isocyanate-, amine- and epoxy resin-free

#### Delivery form

TEFRO<sup>®</sup>cor 310 RP 1.8 kg / 8.0 kg or 15.0 kg / metal bucket

#### Technical data

|                                  |                    |                                 |
|----------------------------------|--------------------|---------------------------------|
| Dry film thickness vertical      | approx. 300        | µm                              |
| Dry film thickness horizontal    | approx. 500        | µm                              |
| Density                          | approx. 1.4        | kg/L                            |
| Mechanically loadable            | after approx. 3    | days at 20 °C / 65 % RH         |
| Chemical resistance              | after approx. 7    | days at 20 °C / 65 % RH         |
| Volatile organic compounds (VOC) | approx. 10.0       | g/L                             |
| Viscosity                        | approx. 2000       | mPa·s                           |
| Solid content                    | approx. 97         | %                               |
| Solid volume                     | approx. 95         | %                               |
| Flash point                      | > 95               | °C                              |
| Colour                           | on request         |                                 |
| Gloss level                      | glossy             |                                 |
| Coverage theoretical             | approx. 0.15       | kg/m <sup>2</sup> at 100 µm DFT |
| Coverage practical               | approx. 0.20       | kg/m <sup>2</sup> at 100 µm DFT |
| Working temperature              | min./max. -5 – +35 | °C                              |
| Substrate temperature            | min./max. -5 – +35 | °C                              |

|                      |                     |                      |
|----------------------|---------------------|----------------------|
| Material temperature | min./max. 5 – +30   | °C                   |
| Humidity             | no restriction      |                      |
| Adhesive free        | approx. 4           | h at 20 °C / 65 % RH |
| Reworking interval   | min. 12 - unlimited | h at 20 °C / 65 % RH |
| Storage temperatures | min./max. 10 – 30   | °C                   |
| Storage time         | 12                  | months               |

### Storage

FREESE resin products must be protected from moisture (rain, condensation, high humidity) and direct sunlight. The delivered pallets should be stored in the welded state. Consume opened containers quickly.

Storage is dry, frost-free, cool and in unopened original containers. In case of deviations please contact manufacturer!

### Preliminary remark

These processing instructions serve as an indication for the user and do not claim to be complete. The actual object-related circumstances must be determined and considered during processing.

The information in these processing instructions does not create any liability claims against the author or manufacturer of the listed materials. For the processing and handling of the product(s) described here, the safety data sheet in the current version must be observed.

### Substrate preparation

For the application of corrosion protection coatings in accordance with established industry standards (e.g. DIN EN ISO 12944) up to corrosion protection category C4 (DIN EN ISO 12944-4), the measures for substrate preparation described below apply.

Weak layers are to be removed. Steel surfaces must be free of mill scale, rust and other foreign layers. Weld seams must be removed. The surface to be coated must be solid, free of grease, wax, silicone, rust, ice, load-bearing, and free from substances with separating effects, whether native or foreign.

Water in dripping, liquid form is not permitted on the surfaces to be coated!

The substrate must be pre-treated in accordance with DIN EN ISO 12944, Part 4 with a degree of preparation Sa 2 1/2 and with an average roughness depth of Rz ≥ 50 µm.

The following measures are sufficient for carrying out coating measures that deviate from established industry standards:

Loose, non-adherent species-specific and foreign surface adhesions must be completely removed; complete surface preparation up to cleanliness grade SA 21/2 is not required but should be agreed with the client. The coating can be applied below the dew point temperature on damp but ice-free surfaces.

## Working instruction

### Agitate

Before processing, stir the material thoroughly. Processing takes place immediately by rolling, brushing or spraying.

### Airless syringes

Application only with suitable and powerful airless device! If necessary, the viscosity can be adjusted with a maximum of 5%, depending on temperature conditions by using TEFRO®cor EP Cleaner.

### Brush / Roll

For rolling applications, approx. 100 µm DFT can be achieved per operation. The coating is superficially structured in brush / roller application. A smoother surface is only possible with spray applications.

### Layoff

TEFRO®cor 310 RP can remain in hoses and implements for a short time. The material should be protected from humidity.

Opened containers must be tightly closed and protected from penetrating humidity. The use at a later date is possible at any time.

### Cleaning

All devices must be cleaned immediately after use with special TEFRO®cor EP Cleaner. The frequency of cleaning depends on the amount of material consumed, the temperature and the time elapsed. All excess material and empty containers must be disposed of in accordance with local laws and regulations.

## Recoating

The maximum revision time is unlimited. The surface must be free of impurities and substances that interfere with adhesion. Otherwise, the surface must be cleaned by sweep blasting and lightly roughened.

Dust deposits must be removed with suitable detergent (no water!).

## Processing instructions

All the characteristic values and consumption data have been determined under laboratory conditions. During processing on the construction site, deviating values may result.

Low temperatures delay, higher temperatures accelerate the setting and hardening of the material! The minimum specified processing temperature must be observed!

No other materials may be added!

## Safety instructions

Read the safety data sheet!

## Safety rules

Work with fresh air supply! Spatial separation and marking of workplaces - stay only if necessary. Do not leave vessels open! Avoid spraying during decanting and transferring/mixing. In case of insufficient ventilation, wear a suitable protective mask!

Avoid contact with eyes, skin and clothing at all costs!

Apply skin protection ointment as a preventive measure to facilitate skin cleansing. Remove product residues from the skin with a suitable detergent. Do not use solvents! Clean hands thoroughly after work and before every break! Use skin care products!

Change contaminated clothes! Change clothes after work! Keep street clothes separate from work clothes!

Observe employment restrictions!

## Protective measures



### Eye protection

Wear goggles.

### Skin protection

Use oily skin protection ointment.

### Respiratory

In case of insufficient ventilation: respirators with category A2/P2 filters.

### Guard

Gloves made of nitrile rubber, butyl rubber. (Category 3 chemical protection gloves, identifiable by the CE mark with four-digit test number). When wearing protective gloves, cotton under-gloves are recommended.

### Body protection

Wear long-sleeved work clothes! In case of splashing: Wear chemical protective clothing! When mixing, wear protective trousers or disposable protective suit (type 5, breathable)!

## First Aid

For every first aid measure: observe self-protection and inform the doctor immediately!

### After eye contact

Rinse for 10 minutes under running water with spread eyelids or take eyewash solution. Always consult an ophthalmologist!

### After skin contact

Take off heavily contaminated clothing. Clean with plenty of soap and water!

### After inhalation

Bring the person out into the fresh air!

### After swallowing

Do not induce vomiting. Drink plenty of water in small sips!

#### **Disclaimer**

We cannot assume any liability for the processing result in individual cases due to the large number of factors beyond our control, such as storage, transport and processing conditions. Despite the highest quality in production, color differences in nuances and shades can arise, depending on the laying and mixing technique.

We assume a guarantee for the consistent quality of our products. We reserve the right to make technical changes and further developments.

#### **General information**

This product data sheet has been compiled based on the latest state of the art and our experience, wants to advise to the best of our knowledge, is not legally binding and does not establish a contractual legal relationship or an ancillary obligation from the purchase contract.

In view of the variety of substrates and object conditions, however, the buyer/user is not released from his obligation to test our materials on his own responsibility for their suitability for the intended purpose under the respective object conditions in a professional and craftsman like manner.

Applications that are not clearly described in this product data sheet may only be carried out after consultation. Without release, they are at your own risk. This applies in particular to combinations with other products.

Only the product data sheet in its latest version is valid.