Product Data Sheet

TEFRO®cor 150 SW-LV

Product Features

Advantages of the solventfree TEFRO®cor 150 SW-LV

- No (zinc rich) primer necessary
- Low risk of quality problems
- Very low VOC emission
- Low odor, environmentally friendly in handling, application and disposal
- No risk of blisters, cracks, shrinkage, pinpricks or intermediate adhesion problems caused by solvent inclusions
- Simple application in respect of dry film thickness tolerances and reworking intervals
- Contrary to solvent-based systems damages by overcoat thickeness is reduced
- Tested and certified according to DIN ISO 12944, BAW-list, PSPC and RWE
- Recommended layer thickness: approx. 200 - 300 µm (vertical airless application), stability up to 400 µm, horizontal application up to 2000 µm possible
- Very good adhesive strength on various substrates such as unalloyed steel, galvanized steel, stainless steel, aluminium, specially cleaned zinc substrates etc
- Excellent chemical resistance, stable to saponification and alkaline resistant
- No whitening of the coating at high humidity or dew formation
- Excellent impact and abrasion resistance

Field of application

High performance coating for heavy marine and industrial corrosion protection. In combination with further system products use on vertical and horizontal inside and outside areas.

Technical Specification

Mixing ratio part A : part B	6 : 1	by weight
(Note: only process complete units)	3,9 : 1	by volume
Volume solids	ca. 100	%
Mixed density at 23 °C	ca. 1,50	kg/dm³
Mixed viscosity at 23 °C	ca. 2000 ± 300	mPa*s
Shore D after 7 days	ca. 80 - 85	
VOC EU Paint Directive 2004/42/EC (calculated)	ca. 3.4	g/l
Flash point	> 95	°C

Application data

Ambient temperature		+10 °C	+20 °C	+30 °C
Processing time:	ca.	200 minutes	100 minutes	45 minutes
Hand dry:	ca.	20 hours	10 hours	5 hours
Mechanically resistant:	ca.	120 hours	60 hours	30 hours
Chemically resistant:	ca.	14 days	7 days	7 days
Maximum rel. air humidity:	ca.	85 %	85 %	85 %
Varnishing time interval:	ca.min.	9 hours	6 hours	3 hours
	ca.max.	3 months*	3 months*	3 months*

*Note : varnishing time interval max. 3 months; the surface must be free from impurities and substances that impair adhesion and not exposed to UV light. Otherwise, the surface must be cleaned by sweep blasting and slightly roughened. Dust deposits to be removed with a suitable cleaning agent (no water).

Coating thickness (vertical):		ca. 400	µm (max. 600 µm stability at 20°C)
Coating thickness (horizontal):	bis zu	ca. 2000	µm
Consumption (theoretical):		ca. 0,30	kg/m² at 200 µm DFT
Consumption (effective):		ca. 0,40	kg/m² at 200 µm DFT (incl. loss factor for overspray)
Surface temperature:		10 - 35	°C
Material temperature:		18 - 30	°C

Surface Preparation

The surface to be coated must be solid, dry, free from grease, wax, silicone, rust, load bearing and free from any separating substances. Less solid layers have to be removed. Steel surfaces must be free from mill skin, rust and other layers. Weld seams to be removed and treated in accordance with DIN EN 148791. The surface should be prepared according to DIN EN ISO 12944 Part 4 with SA 2 1/2 and pretreated with an average roughness depth of Rz >= 50 µm to achieve optimal properties.

Application

During surface preparation and application the dew point distance (at least 3 °C) must be observed. The object temperature should not be below +10 °C and a relative humidity higher than 85 %. The processing and curing time is increased at low temperatures and shortened at high temperatures. No other materials may be added to the coating material.

Mixing:

The product is always delivered in the correct mixing ratio (component A and B). Stir up component A thoroughly using a mixing device (approx. 300 rpm). Then add component B while stirring and mix for 3 minutes. To avoid mixing and / or ratio errors the material has to be poured into another clean container (repotted) and thoroughly mixed again. Sediments should be mixed up thoroughly to achieve the necessary homogeneous mixture. Before mixing the temperature of the individual components should be 18 - 30 °C.

Airless spraying:

A powerful airless device is needed.
Spray hose diameter: minimum 3/8"
Nozzle pressure: minimum 200 bar

Nozzle bore: 0,43 – 0,58 mm (0,017" – 0,023")
Spray angle: 40 – 80 °
For an optimized application result, the flow consistency can be adjusted by using hose insulation, heating,or using a flow heater depending on temperature conditions.

Brush / roll:

Mainly for repairs and as a primer for corners and edges. If necessary additional working steps may be required to achieve the necessary layer thickness. In case of roll application approx. 50 - 200 µm DFT to be achieved per working step. The coating surface will be structured when applied by brush or roller. A smoother surface can only be achieved by airless spraying.

Work interruptions:

The mixed material should be used up as soon as possible and may under no circumstances remain within hoses, spray gun or other parts of the equipment for a longer time.

Cleaning:

Immediately after use all application equipment must be cleaned with special cleaner TEFROcor CLEANER. The frequency of cleaning depends on the amount of material used, the temperature and the time elapsed. All excessive material and empty containers have to be disposed in accordance with the local laws and regulations.

Storage

6 months for component A and B, in a cool, dry and frost free place in the unopened, original containers at 15 - 25 °C, protected from direct sunlight and heat.

Colors

reddish brown, grey, black, other colors upon request.
For reasons related to raw materials and production, slight color/batch deviations are possible.
Generally epoxy coatings tend to chalk due to weathering and UV-exposure which leads to color changes.
Corrosion protection properties remain unaffected by the changes in color.
A weather-resistant topcoat is therefore recommended for a visually appealing result on outside areas.

Packaging

28 kg – metal containers

Important notice

Work protection and safety measures:

Generally observe instructions given on the pails and in corresponding material safety data sheets for work protection and safety measures. National regulations and limitations have to be obeyed.
Avoid inhalation and skin contact. During work wear suitable protective clothing, gloves and goggles. During application suitable ventilation to be provided. In case of skin contact immediately wash skin with plenty of water and soap. In case of eye contact immediately flush with water (medical eye rinse bottle) and seek medical help. During application do not eat, smoke or use open flames.

Disposal:

Material and containers must be disposed properly according to local regulations, please contact national authorities for details and advice. Classification of the materials refers to EWC regulations, further information as per chapter 13 of the safety data sheet. Completley empty pails may be recycled only. Pails with residues have to be disposed at licensed waste disposal companies.

General remarks:

This product data sheet is based on the latest state of art and our experience and is giving recommendations based on our best knowledge. However it is without legal binding and estabilishes neither a contractual legal relationship nor a secondary obligation on any sales contract. This product data sheet does not release the buyer or user of the obligation to check the substructure and the material for the intended purpose. If the buyer or user is going to use the material differently than described above it needs to be discussed with the manufacturer before application. Without approval of the altered use of material usage is at the buyer's or user's own risk. This refers especially to combinations with other products. Only product data sheets of latest date are valid.