Technical Data Sheet

AB-COR® 950 SW-H

2-C-EP-corrosion protection

Description:

2-component epoxy coating with **ABP - bionic technology**
VOC < 2 %, free of benzyl alcohol and nonylphenol

Characteristics:

- excellent corrosion protection
- solvent-free and tar-free
- high abrasion resistance
- low viscosity
- high chemical resistance
- very good adhesion strength
- impact resistant
- with reactive anticorrosive pigments
- inert and harmless once cured

Application:

AB-COR 950 SW-H is an innovative coating which is especially suitable for the protection of steel surfaces / pipes at the oil and gas industry. **AB-COR 950 SW-H** is used as highly mechanical and chemical resistant / hard-wearing coating that offers excellent anticorrosion properties.

AB-COR 950 SW-H must be applied by using airless spray equipment (optional with a flow heater) or manual application (brush / roller); multiple application is recommended to achieve a high dry film thickness.

N/B: The included bionic components form a microfilm on the surface, which can lead to a whitish bloom in combination with moisture. In case of a higher demand to colour stability we recommend to use a topcoat.

Layer thickness:

approx. 250 - 350 microns DFT per layer; we recommend minimum 2 x 250 microns in an interval of 24 hours to avoid adhesion problems between both layers

Consumption:

theoretical: approx. 500 g/m² (at 300 microns DFT) resp. approx. 2.1 m²/kg (approx. 3.3 m²/l)
practical: approx. 700 g/m² (at 300 microns DFT) resp. approx. 1.5 m²/kg (approx. 2.4 m²/l)

The information relating to practical consumption / coverage is calculated to include 30 % loss.
The practical consumption / coverage depends on the conditions of the substrate. We recommend to apply a test area.

Resistant to:

- industrial and marine conditions
- water, seawater, waste water, brackish water
- oil, fat, lubricants and fuels
- wet heat up to +90°C (please consult us)
- non-oxidising, diluted acids
- alkalis, lyes
- many solvents and detergents
- dry heat up to +150°C

Technical Data:

Mixing ratio A : B	9 : 1 by weight resp. 5.6 : 1 by volume
Density (23°C)	approx. 1.55 g/cm³
Volume solids	approx. 100 %
Viscosity (23°C)	approx. 2700 mPa·s ± 500

Details for application:

Pot life (10°C / 23°C / 30°C)	approx. 40 minutes / 25 minutes / 20 minutes
Substrate temperature	minimum 10°C up to maximum 40°C
Material temperature (flow heater if required)	20°C - 35°C
Maximum relative humidity of air	85 %
Dew point - substrate temperature	minimum +3°C above dew point
Duration to overcoat with itself	10°C: min. 7 hours max. 48 hours 23°C: min. 4 hours max. 24 hours 30°C: min. 2 hours max. 12 hours
Curing time / foot traffic (10°C / 23°C / 30°C)	24 hours / 12 hours / 6 hours
Curing time / mech. resistance (10°C / 23°C / 30°C)	72 hours / 48 hours / 24 hours
Curing time / chem. resistance (10°C / 23°C / 30°C)	7 days / 5 days / 3 days
All above values are approximate and may be used as a guideline for specifications	

Clean up machine:

To clean and flush the spray equipment / machine we recommend to use **AB-COR 999** - cleaner with a temperature of approx. 30 - 40°C.

Packaging:

17.5 kg - pails (15.75 kg component A + 1.75 kg component B), other pails are available on request

Colour:

silk grey, red brown (other colours are available on request)
- due to raw material variations and manufacturing techniques, a slight colour / batch difference may occur -

Storage:

12 months, unopened in original drums under dry conditions and a temperature of 15 - 25°C. At temperatures < 10°C crystallisation is possible. Please consult us.

Surface preparation:
The steel surface that is to be coated must be dry and free of mill scale, debris, grease, fat, oil, dust, areas of corrosion / rust as well as other contaminants which may impair the adhesion (see DIN report 28 “corrosion protection for steel constructions by using coating systems – testing the surface regarding to invisible contaminants before application”). Welding beads must be removed, welding seams and welding overlaps must be smooth in accordance with DIN EN 14879-1. Surface preparation by blast cleaning (with tough grit) in accordance with DIN EN 12944-4 (ISO 8501-1/-2), preparation grade Sa 2½. Use only approved blasting abrasives with angular grain. Average roughness R_{Y5} (R_Z) ≥ 50 microns respectively „middle (G)“ in accordance with DIN EN ISO 8503-2 (ISO 8503-2). Prior to, during and after surface preparation, application and curing the substrate temperature must be minimum +3°C / 3K above the dew point (see dew point table). In case of doubt the surface cleanliness must be measured regarding soluble contaminants in accordance with EN ISO 8502-6 (Bresle method) and EN ISO 8502-9 prior to coating.

Preparation of material:

Airless spray resp. brush / roller: The temperature of the components must be at least 20°C. Stir the components thoroughly and mix in the correct ratio using a suitable low speed electric mixer (300 - 400 rpm) for at least 3 minutes or until a completely homogeneous mixture has been achieved. Put the mixed material into a clean container and mix again for at least 1 minute more.

Application method (use without thinner!)**:**

Airless spray	**Brush / roller**
Efficient airless spray equipment, e. g. Graco King Xtreme Pressure ratio: minimum 1 : 68 Spray hose: approx. 30 m ⅜“ + 2 m ¼“ Inlet pressure: 6 - 8 bar Nozzle size: 0.43 - 0.48 mm Spraying angle: 40 - 70° Flow heater: 20 - 35°C We recommend to remove the high pressure filters and to pump the material directly without a siphon tube.	Recommended for small areas, repairs or to precoat edges, only. Repeat the coats until sufficient film thickness is obtained. Normally a film thickness of 150 - 200 microns per coat can be obtained by this method.

Attention! To ensure a proper application at low temperatures a hose insulation and a flow heater have to be used.

N/B: At low temperatures it is necessary to use insulated hoses and a flow heater! Please use a plural component airless spray equipment, if a longer spray hose distance (> 30 m) and an independent application time / pot life is required.

The a. m. information are recommendations only and may be adjusted depending on the conditions of the object.

Resistance:

Mechanical	**Thermal**	**Chemical**
• impact resistant • high abrasion resistant	• dry heat up to +150°C continuously, short-term up to +180°C • wet heat: depending on the medium and thermal stress, please consult us	• industrial and marine conditions • water, seawater, waste water • oil, fat and lubricants • non-oxidising, diluted acids • alkalis, lyes • neutral salt solutions • many solvents and detergents

Due to the fact that the resistance of the coating can be affected by various factors (medium, temperature, concentration, layer thickness, etc.) we recommend to consult us prior to application. In exposure to weathering, the surface tends to chalking and discolouring which will not have any negative effect to the characteristics of the product (in case of higher demand we recommend to use a suitable top coat).

Health and safety:
GISCODE: RE30
While **AB-COR 950 SW-H** is a (nearly) solvent free coating, it is common practice when used in enclosed areas to circulate the air during and after the application until the coating is cured. The ventilation system should be capable of preventing any solvent vapour concentration from reaching the lower explosion limit for any solvents that may be present. Avoid inhalation of the vapours. Wear suitable protective clothing, gloves, eye / face protection and suitable respiratory equipment. Adequate ventilation of the working areas is recommended. After contact with skin, wash immediately with plenty of water and soap. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. When using do not eat, drink, smoke and keep away from sources of ignition. For additional references to safety-hazard warnings, regulations regarding the transport and waste management please refer to the relevant Safety Data Sheet.

AB-Polymerchemie GmbH
Tjüchkampstraße 21 - 24
D - 26605 Aurich
Tel.: +49 (0)4941 - 604360
Fax.: +49 (0)4941 - 6043643
info@ab-polymerchemie.de
www.ab-polymerchemie.de