ALLIED CONSTRUCTION TECHNOLOGIES

TECHNICAL DATA SHEET

AB-COR 950 SW-N

Low Viscosity Corrosion Control Coating

Description

AB-COR 950 SW-N is an innovative, 100% solids epoxy coating which is especially suitable for the protection of steel surfaces / pipes. AB-COR 950 SW-N uses bionic nanotechnology adapted from the adhesion techniques of the Gecko and the Sea Mussel to apply a tight bonding, hydrophobic, coating. It is especially suitable for corrosion protection of steel structures and construction in hydraulic applications such as: flood gates, steel sheet piles, water tanks, water treatment plants and other industrial marine areas. AB-COR 950 SW-N is also used as a highly mechanically and chemically resistant coating that offers excellent anti-corrosion properties. AB-COR 950 SW-N can be applied with airless spray equipment or with a suitable brush or roller. AB-COR 950 SW-N is inert and completely harmless once cured, making it safe for local ecosystems.

The information contained in this Technical Data Sheet is of general nature and is provided in good faith. We accept no liability for errors or omissions. Because use and application of this product are out of our control and is dependent on substrate load (possible contaminates), methods of preparation and application parameters as well as particularities of the individual case. Our advise, verbal written or based on tests, does not exempt the applicator from testing the suitability of the products for the intended use.

Features

- ***Advanced Bionic Nanotechnology***
- ***Benzyl Alcohol & Nonylphenol Free***
- ***Low Viscosity***
- ***Excellent Adhesion Strength***
- ***Withstands up to 300°F Dry***
- ***Withstands up to 195°F Wet***
- ***High Chemical Resistance***
- ***High Abrasion Resistance***
- ***Inert, Safe for Water***

Packaging

3 Gallons

Color

Silk Grey, Red Brown
other colors available on request. Color varies per batch.

Storage

12 months, in original unopened containers under dry conditions and a temperature of 60 - 80° F. *At temperatures under 50° F, crystallization is possible.*

Technical Data

Mixing Ratio (A:B)	**A:5.6 ; B:1**
Density (75° F)	**1.60 g/cm^3**
Volume Solids	**100%**

Resistances

Mechanical	Thermal	Chemical
• Impact Resistant	• Dry: long-term: < 210° F short-term: < 300° F	• Industrial & Marine Conditions • Seawater, Brackish Water
• High Abrasion Resistance	• Wet: short-term: < 195° F *(Long term exposure depends on medium and thermal stress. Consult AC Tech Technical staff for more information.)*	• Oil, Fat, Lubricants, Fuels • Diluted Acids, Alkalis • Neutral Salt Solutions • Solvents and Detergents
• Excellent Hardness		

Details for Application

Pot Life (50° / 75° / 90° F)	**40 Minutes / 25 Minutes / 20 Minutes**
Substrate Temperature	**50 - 100° F**
Material Temperature	**68 - 95° F**
Maximum Relative Humidity	**85%**
Application Humidity Dew Point	**+5° F (Steady and rising)**
Layer Thickness	**10 - 15 mil (DFT) Per Coat**
Re-coat Time (50° / 75° /90° F)	**7 - 48 Hours / 4 - 24 Hours / 2 - 12 Hours**
Cure Time / Foot Traffic (50° / 75° /90° F)	**24 Hours / 12 Hours / 6 Hours**
Cure Time / Mech. Resistance (50° / 75° / 90°F)	**72 Hours / 48 Hours / 24 Hours**
Cure Time / Chem. Resistance (50° / 75° / 90°F)	**7 Days / 5 Days / 3 Days**

Coverage Rates

Type	Spread Rate	Dry Film Thickness
Theoretical	~45 sq. ft. / gallon	12 mil
Practical	~30 sq. ft. / gallon	12 mil

All above values are approximate and may be used as guidelines for specifications. Spread rates, thickness, cure times and resistance values are approximate and dependent upon the surface of application, ambient temperature and humidity conditions of the job site as well as the concentration and layer thickness of material. ***The practical coverage rate is calculated to include 30% loss due to spray loss.*** *Consult AC Tech Technical staff if you are unfamiliar with this product and application.*

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1. Surface Preparation

Steel Surface that is to be coated with AB-COR 950 SW-N 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. Welding beads must be removed, welding seams and welding overlaps must be smooth in accordance.

Surface preparation via sand-blasting (with tough aggregate) should be done in accordance to ASTM D7127-05, preparation grade NACE SSPC-SP10. Use only approved blasting abrasives with angular grain. Average R_{Y5} (R_Z) ≥ 2 mil (respectively “middle g”) in accordance with ASTM D7127-05 or ASTM D4417 (1.5m).

Prior to, during and after surface preparation, application and curing of AB-COR 950 SW-N, the substrate temperature must be at least +5°F above the dew point.

To ensure proper surface preparation and cleanliness, testing for soluble contaminants should be conducted in accordance with ASTM D4940 (Bresle method) and EN ISO 8502-9 (salt strip sensor, Jenway or Jenco) prior to coating.

2. Application Instructions

Prior to mixing, the temperature of both components must be between 68° - 95° F. Open both cans. Premix part A for ~30 seconds, then pour in part B and mix for 3 minutes using a 400 RPM drill and a Jiffy mixer type paddle. Once mixed, pour material into a clean container and mix again for at least 1 minute.

AB-COR 950 SW-N can be applied with an airless sprayer (e.g. Graco King Xtreme) or a brush and/or roller. Normally a Dry Film Thickness (DFT) of 6 to 8 mils per coat can be obtained using a brush or roller. When applying with an airless sprayer, ensure the pressure ratio is at least 1:68. Spray hose must be approximately 65 ft. (3/8” diameter) + 7 ft. (1/4” diameter). Inlet pressure must be between 90 - 115 PSI, with a nozzle site of .017 - .019”. Spray angle must be between 40 and 70°. The Flow heater should be set between 65 to 95 °F.

High pressure filters should be removed and material should be pumped directly without the use of a siphon tube. At low temperatures, insulated hoses and a flow heater must be used to ensure proper flow and application.

3. Applying to Concrete

When applying to concrete, ensure the concrete surface is mechanically prepared to an ICRI Concrete Surface Profile (CSP) of 3 or 4 using appropriate surface preparation equipment. The concrete must be free of cement laitance, dust, oil, fat, curing compounds, and other contaminates. Test substrate accordingly per ASTM F-710. If moisture exceeds 75% RH (ASTM F 2170) or 3 lbs MVER (ASTM F 1869), AC-Tech 2170® must be applied prior to the AB-COR 950 SW-N. For more information, please consult the AC Tech 2170® technical data sheet to consult AC Tech technical staff.

4. Chemical Resistance

Contact AC Tech technical staff for the specified chemical resistance of the AB-COR 950 SW-N product prior to application.

5. Packaging

3 Gallon unit
2.6 Gallon Part A
0.4 Gallon Part B

6. Health and Safety

Always review product MSDS before handling product and obtain appropriate PPE and handling equipment. Do not expose skin, eyes or ingest mixed or unmixed AB-COR 950 SW-N. When dealing with ingestion, note product CAS numbers and treat accordingly. Store, transport and dispose of in accordance with procedures in product MSDS.

7. First Aid

Eye Contact: Flush immediately with clean water and seek medical attention.

Skin Contact: Wash affected areas with soap and fresh water. If a negative skin reaction is recurring, keep individual away and do not come into contact with material.

8. Warranties

AB-COR 950 SW-N provides a five (5) year labor and materials warranty when the product is applied by an AC Tech approved applicator. Any product applied by an unapproved applicator is not covered by any warranty whatsoever. See limited warranty below.

9. Emergency Response

Info Trac: (800) 535-5053
Contract # 104212
Call this number if there is a spill or damaged container.

FOR COMMERCIAL USE ONLY: **KEEP OUT OF REACH OF CHILDREN & PERSONNEL NOT TRAINED IN ITS USAGE**
READ MSDS & SAFETY PRECAUTION PRIOR TO USE

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