

Description

AB-COR 971 is an acrylate polymer based, weatherproof, thin film coating which is suitable as protection of most surfaces. AB-COR 971 uses Nano-Particle-Surface Technology, adapted from the techniques of the lotus flower, to apply a hydrophobic, scratch-resistant, and durable topcoat to most surfaces. AB-COR 971 also protects surfaces from harsh and adverse weather conditions and UV damage or

discoloration. AB-COR 971 also has excellent self-cleaning properties, making it a suitable choice as a topcoat. AB-COR 971 is resistant to water, saltwater, lubricants, fuels, diluted acids and alkalis, and dry heat up to 175°F.

AB-COR 971 can be applied with airless spray equipment, flow heaters and heated hoses and is suitable for high build application in one coat (multiple coats also possible). AB-COR 971 is

inert and completely harmless once cured, making it safe for potable water and local ecosystems.

Characteristics

AB-COR 971 is a highly stable, chemically and mechanically resistant hydrophobic coating that has a variety of applications. 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 constructions in the shipping industry.

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

- **Nano-Particle-Surface Technology**
- **Self-Cleaning**
- **Weatherproof**
- **UV-Resistant**
- **Free of Migrating Plasticizers**
- **Withstands up to 175° F Dry**
- **Good Coverage**
- **Excellent Adhesion to Most Surfaces**
- **Silk Matte Finish**
- **Fast Tack-Free Surface**

Technical Data

Mixing Ratio N/A	1 Component
Density (75°)	1.30 g/cm³
Volume Solids	55%

Resistance

Mechanical	Thermal	Chemical
<ul style="list-style-type: none"> • High Scratch Resistance • UV-Resistant and UV-Protective 	<ul style="list-style-type: none"> • Dry Heat - max: 175° F 	<ul style="list-style-type: none"> • Industrial & Marine Conditions • Splash / Spilling of Water & Seawater • Diluted Acids, Alkalis

Please consult AC Tech technical staff with any chemical or when temperatures are approaching or exceeding limits.

Details for Application

Pot Life (40° / 75° / 90° F)	F)
Substrate Temperature	1 Component
Material Temperature	40 - 90° F
Maximum Relative Humidity	60 - 80° F
Application Humidity Dew Point	85%
Re-coat Time (40° / 75° / 90° F)	+5° F (Steady and rising)
Cure Time / Foot Traffic (40° / 75° / 90° F)	4 Hours / 2 Hours / 1 Hour
Cure Time / Mech. Resistance (40° / 75° / 90° F)	4 Hours / 2 Hours / 1 Hour
Cure Time / Chem. Resistance (40° / 75° / 90°)	14 Days / 72 Hours / 24 Hours

Coverage Rates

Spread Rate	Dry Film Thickness
~ 260 sq. ft. / gallon	3 mil
<i>(1-2 coats required dependant on color and substrate. Concrete requires 2 coats)</i>	

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. Consult AC Tech Technical staff if you are unfamiliar with this product and application.

AB-COR 971

Self-Cleaning Acrylate Top Coat

1. Surface Preparation

The substrate that is to be coated with AB-COR 971 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 No. 2 / SSPC-SP10. Use only approved blasting abrasives with angular grain. Average R_{v5} (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 971, 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 60° - 80° F. Open can and mix material 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. If diluting with xylene is required, please consult the AC Tech technical staff for further instructions.

AB-COR 971 can be applied with an airless sprayer (e.g. Graco King Xtreme) or a brush and/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 40 - 70 PSI, with a nozzle size of .013 - .015". Spray angle must be between 40 - 70°. The Flow heater should be set between 60° to 80° F. When using a brush/roller, ensure that material is applied to the specified dry film thickness. Repeat application as necessary to achieve prescribed thickness or desired finish.

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 prepare surface to a CSP 3/4 profile using appropriate surface preparation equipment. The concrete must be free of cement laitance, dust, oil, fat, curing compounds, and other contaminants. Test substrate accordingly per ASTM F 710. If moisture exceeds 75% RH or 3 lbs / 1000 sq. ft. / 24 hours, apply the AC-Tech 2170® moisture reduction system at the appropriate spread rate. Please see AC Tech 2170® technical data sheet for further information.

4. Chemical Resistance

Contact AC Tech technical staff for the specified chemical resistance of the AB-COR 971 product prior to application.

5. Packaging

2.6 and 6.1 Gallon units

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 AB-COR 971. 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 971 provides a ten (10) year material 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**

LIMITED WARRANTY: Allied Construction Technologies (AC Tech) warrants that this product is in accordance with the published specifications to be free of manufacturing defects and in the event that is product is proved to be defective and fails to meet printed specifications or published performance standards, (subject to all conditions and exclusions per the warranty sheet) AC Tech shall replace only those products proved defective. AC Tech shall not be responsible for any consequential damages due to the breach of this warranty. Notwithstanding the foregoing, AC Tech's liability shall not exceed the cost of the original product purchased. THE AB-COR 971 TECHNICAL DATA SHEET MAKES NO OTHER WARRANTIES EITHER EXPRESSED OR IMPLIED AS TO THE MERCHANTABILITY OR THE FITNESS OF THIS PRODUCT FOR A PARTICULAR PURPOSE. This agreement shall be governed by and construed in accordance with the laws of the Commonwealth of Virginia and all parties consent to jurisdiction in the courts located in the cities of Norfolk, VA and all parties agree that his is the sole and appropriate venue for any disputes arising out of the relationship created in this warranty.

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