

ACE-GARD 421

EPOXY PRIMER/INTERMEDIATE COATING

FAST DRY, HIGH BUILD

GENERIC TYPE: Cross-linked epoxy.

USE:

ACE-GARD 421 is a new technology, high performance, highbuild sandable epoxy primer and/or intermediate coat for use where primers are traditionally top-coated with aliphatic polyurethanes eg for FRP boats and composites, epoxy faired substrates, structural steel, agricultural equipment, industrial machinery, railway carriages, trucks, buses etc. Also suitable as a masonry primer.

FEATURES:

- High solids (80% by weight, 66% by volume)
- High build
- Fast cure but retains 6 hour pot life
- No induction time required
- Excellent low temperature cure (recoat same day @ 5°C). Will cure down to 0°C.
- Useable under extreme conditions - moisture tolerant
- Excellent chemical and water and salt water resistance
- Early excellent sandability
- Hydrophobic (repels water)
- Excellent corrosion resistance

Colour: Beige

Mix Ratio: 4 : 1 by volume (base : hardener)

Pot Life: 6 hours at 20°C

Dust Free: 1 hour at 20°C

Sandable: 2 hours at 20°C

Dry Hard: 4 hours at 20°C

Recommended Dry

Film Thickness: 75 - 125 microns/coat

Recoat/Topcoat Times:

	Minimum	Maximum
5°C	6 hours	30 days
15°C	4 hours	30 days
20°C	2 hours	30 days

APPLICATION INSTRUCTIONS - ACE-GARD 421

These instructions are not intended to show product recommendations for specific service. They are issued as an aid in determining correct surface preparation, mixing instructions and application procedure. It is assumed that the proper product recommendations have been made. These instructions should be followed closely to obtain the maximum service from the materials.

SURFACE PREPARATION: Remove all oil or grease from surface to be coated with Thinner #2 or Surface Cleaner #3 (refer to Surface Cleaner #3 instructions) in accordance with SSPC-SP 1.

FRP: Sand back surface with 80-120 grit sandpaper to remove all gloss. Solvent clean surface to remove all traces of dust and contaminants.

Steel: For mild environments Hand Tool or Power Tool Clean in accordance with SSPC-SP 2, SSPC-SP 11 to produce a rust-scale free surface. For more severe environments, abrasive blast to a Commercial Finish in accordance with SSPC-SP 6 and obtain a 40-75 micron blast profile. For immersion service, abrasive blast to a Near White Metal Finish in accordance with SSPC-SP10 and obtain a 40-75 micron blast profile.

Concrete: Must be cured at least 28 days at 21°C and 50% R.H. or equivalent time. Remove fins and other protrusions by stoning, sanding or grinding. Abrasive blast to open all surface voids and remove all form oils, incompatible curing agents, hardeners, laitance and other foreign matter and produce a surface texture similar to that of a medium grit sandpaper. Voids in the concrete may require surfacing. Blow or vacuum off sand and dust.

MIXING: Power mix Part A separately, then combine and power mix in the following proportions:

	<u>5 Litre Kit</u>	<u>10 Litre Kit</u>
ACE-GARD Pt A	4 litres	8 litres
ACE-GARD Pt B	1 litre	2 litres

THINNING: For spray applications, may be thinned up to 10% with Thinner #2. For hot and windy conditions, or for brush and roller application, may be thinned up to 12% with Thinner #33.

Use of thinners other than those supplied or approved by Carboline may adversely affect product performance and void product warranty, whether express or implied.

POT LIFE: Six hours at 20°C and less at higher temperatures.

APPLICATION CONDITIONS:

	<u>Material</u>	<u>Surfaces</u>	<u>Ambient</u>	<u>Humidity</u>
Normal	15-30°C	15-30°C	15-35°C	0-80%
Minimum	10°C	2°C	2°C	0%
Maximum	30°C	50°C	45°C	90%

Do not apply or cure the material when the surface temperature is less than 3°C above the dew point.

Special thinning and application techniques may be required above or below normal conditions.

CAUTION: CONTAINS FLAMMABLE SOLVENTS. KEEP AWAY FROM SPARKS AND OPEN FLAMES. IN CONFINED AREAS, WORKMEN MUST WEAR FRESH AIRLINE RESPIRATORS. HYPERSENSITIVE PERSONS SHOULD WEAR GLOVES OR USE PROTECTIVE CREAM. ALL ELECTRIC EQUIPMENT AND INSTALLATIONS SHOULD BE AMDE AND GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. IN AREAS WHERE EXPLOSION HAZARDS EXIST, WORKMEN SHOULD BE REQUIRED TO USE NONFERROUS TOOLS AND TO WEAR CONDUCTIVE AND NONSPARKING SHOES.

SPRAY: This is a high solids coating and may require slight adjustments in spray techniques. Wet film thicknesses are easily and quickly achieved. The following spray equipment has been found suitable and is available from manufacturers such as Binks, DeVilbiss and Graco.

Conventional: Pressure pot equipped with dual regulators, 3/8 I.D. minimum material hose, .070" I.D. fluid tip and appropriate air cap.

Airless:

<i>Pump Ratio:</i>	<i>30:1 (min) *</i>
<i>GPM Output:</i>	<i>3.0 (min)</i>
<i>Material Hose:</i>	<i>3/8" I.D. (min.)</i>
<i>Tip Size:</i>	<i>.017-.021"</i>
<i>Output psi:</i>	<i>2100-2300</i>
<i>Filter Size:</i>	<i>60 mesh</i>

* Teflon packings are recommended and are available from the pump manufacturer.

BRUSH OR ROLLER: Use medium bristle brush, or good quality short nap roller. Avoid excessive rebrushing and rerolling. Two coats may be required to obtain desired appearance, hiding and recommended DFT. For best results, tie-in within 10 minutes at 24°C.

VENTILATION & SAFETY: WARNING: VAPOURS MAY CAUSE EXPLOSION. when used as a tank lining or in enclosed areas, thorough air circulation must be used during and after application until the coating is cured. The ventilation system should be capable of preventing the solvent vapour concentration from reaching the lower explosion limit for the solvents used. In addition to ensuring proper ventilation, fresh air respirators or fresh air hoods must be used by all application personnel. where flammable solvents exist, explosion-proof lighting must be used. Hypersensitive persons should wear clean, protective clothing, gloves and/or protective cream on face, hands and all exposed areas.

CLEANUP: Use Thinner #2.

CAUTION: READ AND FOLLOW ALL CAUTION STATEMENTS ON THIS PRODUCT DATA SHEET AND ON ALL MATERIAL SAFETY DATA SHEETS FOR THIS PRODUCT.

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