



TECHNICAL DATA

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ARL 6000 EPOXY NOVALAC ACID RESISTANT LINING

Product Description

A high performance, 100% solids, epoxy novolac designed to protect surfaces against severe chemical attack

Features

- Low viscosity achieves 100% contact with surface.
- Easily applied using a brush, roller or squeegee.
- Excellent chemical resistance to concentrated acids.

Recommended Uses

- Protect metal and concrete surfaces from chemical attack.
- Use on floors and containment areas around chemical storage tanks and pumps.
- On tanks handling concentrated acids and other chemicals.

Typical Properties

Solids by Volume	100%
Volatile Organic Compounds	0.0 lb/gal (0 g/l)
Theoretical Coverage	1604 ft ² /gal @ 1 mil
Recommend DFT	24 - 40 mils (applied in multiple coats)
Number of Coats	2 or more
Mix Ratio (by volume)	1 Hardener : 1.5 Resin
Mixed Viscosity	3600 cps
Shelf Life @ 60-90°F (16-32°C)	Part A 12 months Part B 12 months
Temperature Resistance	200°F (dry)
Color	Gray

Ordering Information

Packaging:	2 gal kit
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Chemical Resistance Cure Schedule A

Sulfuric Acid 5%	E	Ethanol 100%	E
Sulfuric Acid 10%	E	Methanol	U
Sulfuric Acid 30%	E	Cellosolve	E
Sulfuric Acid 50%	E	Butyl acetate	E
Sulfuric Acid 98%	VG	Acetone	VG
Hydrochloric Acid 10%	E	MEK	E
Hydrochloric Acid 20%	E	Methylene Chloride	U
Hydrochloric Acid 36%	U	Toluene	E
Nitric Acid 10%	F	JP-4 Jet Fuel	VG
Nitric Acid 20%	E	Water	E
Chromic Acid 10%	F	Saturated salt solution	E
Phosphoric Acid 10%	E	Leaded Gasoline	E
Phosphoric Acid 30%	E	Mineral Spirits	E
Acetic Acid 10%	U	Propylene Glycol	E
Acetic Acid 30%	U	ASTM #3 oil	E
Ammonia 30%	U		

- **Cure Schedule "A"**
- 10 day room temperature cure @ 75°F.
- Abrasive blasted cold rolled steel @ SSPC-SP 5
- DFT = 12 - 16 mils
- E = Excellent VG = Very Good F = Fair U = Unsatisfactory

Chemical Resistance Cure Schedule B

Sulfuric Acid 5%	E	Ethanol 100%	E
Sulfuric Acid 10%	E	Methanol	VG
Sulfuric Acid 30%	E	Cellosolve	E
Sulfuric Acid 50%	E	Butyl acetate	E
Sulfuric Acid 98%	VG	Acetone	VG
Hydrochloric Acid 10%	E	MEK	F
Hydrochloric Acid 20%	E	Methylene Chloride	F
Hydrochloric Acid 36%	F	Toluene	E
Nitric Acid 10%	E	JP-4 Jet Fuel	E
Nitric Acid 20%	E	Water	E
Chromic Acid 10%	F	Saturated salt solution	E
Phosphoric Acid 10%	E	Leaded Gasoline	E
Phosphoric Acid 30%	E	Mineral Spirits	E
Acetic Acid 10%	F	Propylene Glycol	E
Acetic Acid 30%	U	ASTM #3 oil	E
Ammonia 30%	E		

- **Cure Schedule "B"**
- 24 hour room temperature cure, plus 4 hour force cure @ 180° F
- Abrasive blasted cold rolled steel @ SSPC-SP 5
- DFT = 12 - 16 mils
- E = Excellent VG = Very Good F = Fair U = Unsatisfactory

APPLICATION INFORMATION

ARL 6000

Surface Preparation

Remove all oil, grease or other contaminants from the surface to be coated in accordance with SSPC-SP 1.

Steel: Abrasive blast to a White Metal Blast in accordance with SSPC-SP 5 and obtain a 2-4 mil (50-100 μ) angular anchor pattern.

Concrete: Must be cured a minimum of 28 days at 70°F (21°C) and 50% RH, or equivalent. Remove fins and other protrusions by stoning or grinding. Abrasive blast in accordance with SSPC-SP 13 or ASTM D4258 to open all surface voids and remove all form oils, incompatible curing agents, hardeners, laitance, other foreign materials and produce a angular surface texture similar to that of medium grit sandpaper. Blow or vacuum off abrasive and dust. Surface defects should be repaired before the coating is applied.

Note: For equipment that has been handling sea water or other salt solutions a test for chloride contamination should be performed prior to application. If chlorides are present at 40 ppm or greater the substrate shall be re-cleaned until the chlorides are less than 40 ppm.

Mixing

Add 1 part hardener to 1.5 parts resin and power mix thoroughly for about 4 minutes or until a uniform consistency is achieved, being careful to mix material from bottom and sides of the container.

It is strongly recommended that only full kits be mixed. If less than full kits use the following ratio by volume:

- 1 part hardener to 1.5 parts resin

Thinning

DO NOT THIN

Pot Life

Material Temperature	Time
75°F (24°C)	35 minutes

Application Conditions

	Normal	Minimum	Maximum
Material	75-90°F (24-32°C)	55°F (13°C)	90°F (32°C)
Surface	75-90°F (24-32°C)	55°F (13°C)	90°F (32°C)
Ambient	75-90°F (24-32°C)	55°F (10°C)	90°F (32°C)
Humidity	30-50%	0%	85%

- Surface temperature must be 5°F (3°C) above the dew point.

Caution: Application in or exposure to direct sunlight is not recommended.

Application

For best results material should be kept and applied at room temperature.

Material should be applied by short bristle brush or squeegee making sure that 100% contact with all surfaces is achieved.

Apply in multiple coats.

Concrete: Prime with CS 2000 and allow to cure for a minimum of 4 hours and a maximum of 24 hours @ 75°F before application of ARL 6000 per above procedure.

If the maximum time has been surpassed or the CS 2000 is fully cured, the surface must be roughened prior to application of the ARL 6000.

Use MEK or similar solvent for clean up.

Cure Time

These times are based on a 30-50% RH. Excessive film thickness, cooler temperatures or inadequate ventilation will require longer cure times and could result in premature failure.

Surface Temperature

	75°F
Working Time	35 minutes
Tack Free	3 hours
Recoat (min)	3 hours
Recoat (max)	8 hours
Functional Cure	48 hours
Chemical Exposure	10 days

- If the material has exceeded its maximum recoat time or full cure time contact ITW Futura Coatings for recommended recoating procedures.
- Curing can be accelerated by using heat after the coating has been allowed to harden under ambient conditions. At 180°F material will cure in 4 hours.

Safety Information

- Read the Material Safety Data Sheet (MSDS) and container labels for detailed health and safety information.
- Do not apply material in enclosed areas without adequate air exchange and ventilation.
- All application personnel must use respirators rated for organic vapors, or in confined spaces wear fresh air respirators or fresh air hoods.
- Wear protective clothing, gloves and eye protection.
- Breathing fumes or contact with the skin may cause severe allergic reactions.
- **This product is intended for industrial use by properly trained professional applicators only.**

Storage Conditions

- Coatings need to be protected from moisture contamination. Store drums and pails in a dry location at 55-90°F (13-32°C).
- Materials **must** be kept above 55°F (13°C).

ITW FUTURA COATINGS, 1685 GALT INDUSTRIAL BLVD., ST LOUIS, MO, (314) 733-1110

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