



## Technical Data

## GatorHyde ARC

### Aromatic Polyurea Spray

NB 1214

Revised: 03/2011

#### MANUFACTURER

Chemline, Inc.

5151 Natural Bridge Road

St. Louis, MO 63115

Phone: (314) 664-2230

#### PRODUCT DESCRIPTION:

**GatorHyde ARC** is a two component, 100% solids, zero VOC's (Volatile Organic Compound), pure polyurea (all Amine and Polyetheramine-based) that has been developed for concrete restoration, corrosion protection, and waterproofing applications. This elastomer drastically reduces any moisture problems that may cause bubbling in most polyurea systems. **GatorHyde ARC** can be applied at temperatures ranging from -30°F to 350°F. This aromatic polyurea elastomer displays excellent chemical resistance, thermal stability and UV resistance. **GatorHyde ARC** can be "stippled" for anti-skid purposes. If color stability is a critical issue, **GatorHyde ARC** should be top-coated with an aliphatic material. This material is a very forgiving polyurea developed to minimize problems associated with application in the field.

#### APPLICATION EQUIPMENT:

**GatorHyde ARC** must be applied utilizing a high pressure, plural component pump (1:1 by Volume) such as the Graco Reactor E-10, E-XP1, E-XP2 or Graco H-XP2. When ready to spray this material, the proportioning unit must be capable of supplying the correct pressure and heat which is mandatory in order to apply the product in a consistent, efficient manner. Depending on the plural component spray system used, **GatorHyde ARC** should be applied at a constant pressure range between 2000 and 2500 psi and material temperature of 140°F to 160°F. For additional information on equipment and installation issues, contact GatorHyde for details.

#### AVAILABLE COLORS:

- Black
- Light Gray

Custom colors on request.

Please allow an extra 10-14 days for delivery on all custom color orders.

#### INSTALLATION RECOMMENDATIONS:

**Concrete**— For optimum performance, the concrete should be hydro-blasted or sand-blasted. The concrete should be allowed to cure a minimum of 30 days. For maximum adhesion, **GatorHyde ARC** should always be applied over PoxyPrime primer for maximum adhesion. (See PoxyPrime Spec Data for details). After proper preparation, **GatorHyde ARC** should be applied in a cross directional (North, South, East, and West) method. It is recommended to apply **GatorHyde ARC** at a minimum thickness of 30 mils for waterproofing purposes. On horizontal surface applications, a "stipple" coat can be applied for non-skid purposes, after reaching the initial desired film thickness. (Note! If a more aggressive stipple is required, use GatorHyde CG)

#### PRIMING VARIOUS SUBSTRATES:

Depending on application use, choosing the right primer can be the difference between bonding success and failure. The manufacturer recommends the following primers to be installed prior to applying **GatorHyde ARC**.

1. **Concrete, Concrete Block and Masonry surfaces**
  - a. **PoxyPrime** a 100% solids epoxy primer mfg. by GatorHyde. Prior to applying said primer, all surface areas should be properly prepared by removing any and all loose dirt, grease, oil, failed paint or coating systems. Surfaces are to be steel shot or sand blasted in order to provide the right surface profile. Once the surface has been properly prepared, **PoxyPrime** is to be installed at approximately 100-150 SF per gallon, depending on the porosity of the surface and recommended application specification. See mfg. for product spec data and MSDS sheet.
2. **Steel surfaces:**
  - a. **PoxyPrime** mfg. by GatorHyde or ChemLok 213 mfg. by Lord Chemical Company. Prior to applying either of these recommended primers, make sure that the steel surface is free of all petrol chemical, paint, coatings or any other surface contaminates. Next abrade the entire surface using the steel shot or sand blast method. Once the surface has been properly prepared, then and only then, install the specified primer to the steel surface in accordance with the manufacturer's recommended coverage rate. Allow the appropriate curing time of the primer before applying the **GatorHyde ARC**. See manufacturer for product spec data and MSDS sheets.

### 3. Aluminum & Galvanized Surfaces:

- a. **GatorHyde Wash Primer** manufactured by GatorHyde is a special primer developed for use on all aluminum and galvanized surfaces prior to the application of **GatorHyde ARC**. All surfaces shall be properly prepared before applying primer by removing all loose dirt, dust, petrol chemicals, paint, mold release and coating systems. Once contaminants have been properly removed then apply **GatorHyde Wash Primer** in accordance with specification data as supplied by GatorHyde. Once primer has been applied, wait the recommended amount of time prior to installing the **GatorHyde ARC**. See manufacturer for product spec data and MSDS sheets.

### 4. Wood, Plywood, Masonite Particle Board:

- a. **PoxyPrime** 100% solids epoxy primer mfg. by GatorHyde shall be the specified primer. Prior to installing **PoxyPrime** on any wood surface make sure that the wood is dry and free from all forms of oils, release agents, petrol chemicals, dirt, failed paint and other contaminants which may prevent the primer from properly bonding to the wood surface. Depending on the type of substrate, it may be necessary to apply two coats of **PoxyPrime** in order to eliminate the possibility of pin holing of the **GatorHyde ARC** when applied. Once the primer has been applied allow the primer to cure in accordance with the manufacturer's specification data prior to applying **GatorHyde ARC**. See manufacturer for product spec data and MSDS sheets.

### 5. Fiberglass Surfaces:

- a. **IsoPrime II**, a solvented, single component primer, mfg. by GatorHyde, is recommended for use on all fiberglass surfaces before the application of **GatorHyde ARC**. Prior to preparation of the surface make sure all loose dirt, debris, petrol chemicals, release agent and primers have been thoroughly removed. Rough up the entire surface area using a coarse, variable speed buffer with a medium to course grit sanding disk. Next wipe surface area clean with acetone before applying **IsoPrime II**. **Do Not Apply primer** full strength. It must be diluted with acetone at a volume ratio of 50:50. Once mixed, the primer can then be applied with either a cup gun, airless sprayer or can be rolled or brushed on. The product should be applied at approximately ½ to 1 mil (no more). Allow primer to become tack free, approximately 30 minutes. Once tack free then install **GatorHyde ARC** at the specified film thickness. See manufacturer for product spec data and MSDS.

### PRODUCT USES:

**GatorHyde ARC** can be used to rehabilitate and protect concrete or masonry surfaces which have been damaged from mechanical, chemical or temperature related abuse. **GatorHyde ARC** can be used as a protective, elastomeric membrane coating for applications in or on:

- Cold Storage Facilities
- Food Processing Plants
- Bottling and Canning Facilities
- Fast Food Facilities
- Airport Hangers
- Waste Water Treatment Plants
- Parking Decks and Ramps
- Walk Ways and Balcony Decks
- Industrial Facilities
- Manufacturing Facilities
- Primary/Secondary Containment over Geo-Textile Fabric
- Vertical or Horizontal Concrete or Wood Surfaces
- Masonry Block
- Insulation Board
- Sprayed on Urethane Foam
- Over FRP Board
- Cement Board
- Steel Pipe
- Commercial Kitchen or Bakery Floors

### APPLICATION NOTES:

It is very important to maintain constant pressures while spraying. A radical variation of these pressures can result in loss of physical properties, poor color retention, bubbling, blistering and de-bonding of the material from the surface applied to. Hose temperatures should maintain a minimum temperature of 160°F. The resin and isocyanate heaters should maintain 160°F. However, line pressures may vary with equipment. "The contractor should verify consistency to his own satisfaction."

### ADVANTAGES:

- 100% Solids, Meets VOC Regulations
- Flexible, Excellent Elongation
- Excellent Thermal Stability
- Good Resistance to a Variety of Solvents, Acids and Caustics
- Seamless, Resilient, Non-Cracking Elastomer
- Excellent Corrosion Protection
- Low Perm Rate
- Fast Reactivity and Cure Time (No Catalysts)
- Cures From -30°F to 350°F
- Return Projects to Service in 60 Minutes

**TYPICAL PHYSICAL PROPERTIES :**

TENSILE STRENGTH, PSI	ASTM D412	3850
ELONGATION, %	ASTM D412	425
100% MODULUS	ASTM D412	1460
200% MODULUS	ASTM D412	1960
300% MODULUS	ASTM D412	2650
TEAR STRENGTH, PLI	ASTM D624	570
HARDNESS, SHORE A	ASTM D2240	98
HARDNESS, SHORE D	ASTM D2240	52
FLEXIBILITY, 1/8" MANDREL	ASTM D1737	PASS
FLASH POINT, °F	PENSKY-MARTIN	>200
TABER ABRASION, MG LOSS	ASTM D4060	17.0
CS 17 WHEELS	1KG, 1000 REVS	
VISCOSITY B-SIDE (75°F)	CPS	650
VISCOSITY A-SIDE (75°F)	CPS	350
A-SIDE HOSE TEMPERATURE	°F	140-160
B-SIDE HOSE TEMPERATURE	°F	140-160
BLOCK TEMPERATURE	°F	160
CONSTANT PRESSURE, PSI		2000

**TYPICAL PROCESSING PROPERTIES:**

GEL TIME	SECONDS	11
TACK FREE TIME	SECONDS	22
VOLUME RATIO	V:V	1:1

**CLEAN-UP/DISPOSAL:**

Cured product may be disposed of without restriction. The un-cured isocyanate and resin portions should be disposed of according to local, state, and federal laws.

**SAFETY & HANDLING:**

MSDS will be mailed immediately upon receipt of a purchase order or upon request. All personnel should read and understand the safety recommendations. All body parts should be covered and activated charcoal respirators (at a minimum-forced air is preferable) are necessary for safe application of this product. Keep uncured product away from children at all times.

**SHELF LIFE & STORAGE:**

Six months to one year in factory delivered, unopened drums. Keep away from extreme heat, freezing, and moisture.

**PACKAGING:**

GatorHyde ARC is available in 5 gallon pails, 55 gallon drums, or 275 gallon totes.

**SHIPPING INFORMATION:**

GatorHyde ARC can be shipped via most commercial truck lines. The shipping class is "55" polyurea spray. The "A" and "B" sides are unregulated.

	Net Weight	Container Wt	Total Wt
A-side 5gal pails	45 lbs	2 lbs	47 lbs
A-side 55 gal drum	500 lbs	45 lbs	545 lbs
A-side 275 gal tote	2500 lbs	140 lbs	2640 lbs
B-side 5gal pails	42 lbs	2 lbs	44 lbs
B-side 55 gal drum	462 lbs	45 lbs	507 lbs
B-side 275 gal tote	2310 lbs	140 lbs	2450 lbs

**CHEMICAL RESISTANCE:****ASTM D3912 MOD. 3 DAY IMMERSION**

Chemical	Result (25°C)
Acetic Acid (5%)	R
Anti-freeze	R
Brake Fluid (DOT3)	RC
Diesel Fuel	R
Gasoline	R
Hydrochloric Acid (20%)	R
Motor Oil	R,Dis
Sodium Hydroxide (10%)	R
Sulfuric Acid (10%)	R,Dis
Transmission Fluid	R
JP-4 (Jet Fuel)	RC
Xylene	RC

**R = Recommend** = Liffle or no Visible Damage

**RC = Recommend Conditional** = Some Effect-Swelling, Discoloration

**C = Conditional** = Cracking—Wash Down Within One Hour of Spillage to Avoid Effects

**NR = Not Recommended**

**Dis = Discoloration Only**

**ADHESION RESULTS:****ASTM D-4541 Patti Tester**

Concrete (direct to concrete)	(NO PRIMER):	>350PSI
	- Glue Failure	
Concrete	PoxyPrime	600 PSI
	-EPOXY Glue Failure	
	-1/8" Concrete on dolly	
Carbon Steel (direct)		900 PSI

**WARRANTY:**

The technical data and any other printed information furnished by GatorHyde are true and accurate to the best of our knowledge. **GatorHyde ARC** conforms to in-house quality control procedures and should be considered free of defects. Due to the wide range of applications of this product, it is impossible to assume responsibility for any errors in regard to application, coverage, workmanship, over-spray, or injuries resulting from the use of this product. GatorHyde makes no warranty expressed or implied, of its products and shall not be liable for indirect or consequential damage in any event.

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