

### PRODUCT DESCRIPTION

**Generic:** Aliphatic Acrylic Urethane

**General Description:** A high performance, low VOC two component chemically-cured aliphatic urethane gloss enamel for use in areas where maximum gloss & color retention are required.

**Typical Uses:** For use on properly prepared and primed steel, concrete or steel floors, masonry, drywall, plaster, metal, concrete block, galvanized aluminum, poured concrete, and glazed brick. Ideal for use on exterior or interior structural steel, piping, metal buildings, control cabinetry, conveyors, pumps, storage tank exteriors, motors, machinery, and transportation vehicles. Can also be used in the hard service areas of food processing plants, dairies, schools, restaurants, hospitals, correctional facilities, factories, stadiums, arenas, and amusement parks.

### FEATURES

**Advantages:**

- Exceptional gloss and color retention
- Excellent abrasion and chemical resistance
- Higher solids and higher film build than typical urethane finishes
- VOC < 100 g/L (TBAC Exempt)
- Easily applied by brush, roller or spray
- Wide color selection, including safety colors
- Excellent resistance to marring, chipping, and scratching
- Contains ultraviolet light stabilizer
- Meets SSPC Paint 36, Level 3

**Graffiti Resistance:** Excellent resistance to most graffiti materials such as spray paint, magic markers and lipstick. Contact your ICI Paints Representative for more information.

**Limitations of Use:** Color may change as temperature approaches 250°F (121°C) limit, but the film will remain intact.

### SPECIFICATION DATA

**Color:** White (tintable), ready-mixed & custom colors

**Finish:** Gloss (90 units @ 60°)

**Weight/Gallon:** 11.2 lbs./gal. (1.34 kg/L) – varies with color

**VOC (TBAC Exempt):** <100 g/L (0.83 lbs. / gal.)

**VOC (TBAC Exempt):** <100 g/L (0.83 lbs. / gal.) when thinned

with # 800 VOC Compliant Reducer or T-0 Thinner

**VOC (TBAC Non-Exempt)** < 250 g/L (2.08 lbs./gal.) when

thinned 5% with or T-17 Thinner

**VOC (TBAC Non-Exempt)** < 250 g/L (2.08 lbs./gal.) when

thinned with T-0 Thinner

**Solids By Volume:** 69% ± 2%

**Theoretical Coverage at 1.0 Mil (25 microns) Dry:**

1222 sq. ft./gal. (27.5 m<sup>2</sup>/L)

**Recommended Film Thickness:** 2.0-3.0 mils (50-75 microns)

dry – 2.8-4.3 mils (70-105 microns) wet

**Systems:** Please consult the appropriate system guide, the particular job specification or your ICI Paints Representative for proper systems using this product. Systems must be selected considering the particular environment involved.

**Minimum Dry Time (ASTM D 1640):** 2 mils (50 microns) DFT

Substrate Temperature	40°F (4°C)	60°F (16°C)	80°F (27°C)	100°F (38°C)
Minimum Recoat	13Hours	10 Hours	6 Hours	4 Hours
Dry Hard	>32Hour	24 Hours	16 Hours	12 Hours
Maximum Recoat				
Self	2 Weeks	2 Weeks	2 Weeks	1 Week

Ventilation, film thickness, humidity, thinning, and other factors can influence the rate of dry.

**Warning:** The above table provides general guidelines only. Always consult your ICI Paints Representative for appropriate recoat windows since the maximum aged recoat time of this product may be significantly shortened or lengthened by a variety of conditions, including, but not limited to humidity, surface temperature, and the use of additives or thinners. The above recoat windows may not apply if recoating with a product other than those listed above. If the maximum aged recoat window is exceeded, please consult your ICI Paints Representative for appropriate recommendations to enhance adhesion. Failure to observe these precautions may result in intercoat delamination.

**Shelf Life:** Over 12 months at 77°F (25°C) – unopened.

**Mix Ratio By Volume:** 4 (base): 1 (converter) – see mixing instructions.

**Induction:** None - see mixing instructions.

**Pot Life:** 2.5 hours @ 77°F (25°C)

### PERFORMANCE DATA

**Adhesion:** (ASTM D 4541) - Excellent

**Salt Spray Resistance:** (ASTM B 117) - Excellent

**Abrasion Resistance:** (ASTM D 4060) - Excellent

**Humidity Resistance:** (ASTM D 4585) - Excellent

**Service Temperature Limits:** 250°F (121°C) dry

**Hardness:** (ASTM D 3363), 7 day cure @ 77°F (25°C) – 4H

**Chemical Resistance:** (ASTM D 1308 – 24 hour contact) resists splash and spillage of alkalis, salts, moisture, oils, greases, foodstuffs and detergents.

**Stain Resistance:** (ASTM D 1308 – 1 week contact) Excellent. Resists stains such as crayon, lipstick, coffee, soil medium, shoe polish, grape juice, ink pen, marker, and spray paint.

**DANGER! FLAMMABLE. HARMFUL OR FATAL IF SWALLOWED.** Read label and Material Safety Data Sheet Prior to Use. See other cautions on last page. DSF3-0696

## GENERAL SURFACE PREPARATION

All surfaces must be sound, clean, dry, and free of oil, grease, mildew, form release agents, laitance, and foreign matter. To insure the best appearance, the primer or undercoat should be smooth and free of any surface defects such as runs, dry spray or heavy orange peel. **Use only VOC compliant products in California.**

**New Surfaces:** Clean and prime with DEVTRAN® 203, DEVTRAN 223, DEVTRAN 224HS, BAR-RUST® 231, BAR-RUST 231V, BAR-RUST 233H, BAR-RUST 233V, BAR-RUST 235H, or TRU-GLAZE-WB™ 4030 epoxy primers. **Concrete Block** - Fill with DEVTRAN 224HS, BAR-RUST 231, BAR-RUST 231V, BAR-RUST 233V, BAR-RUST 235H, or BAR-RUST 233H primers, TRU-GLAZE-WB 4015 or BLOXFIL® 4000 block fillers. **Fiberglass** - Solvent wipe, scuff sand and solvent wipe again. Prime with BAR-RUST 235H epoxy primer. **Concrete Floors, Poured Concrete** - Cure at least 30 days. pH must be 10.0 or lower before painting. Acid etch or abrasive blast slick, glazed concrete or concrete with laitance. Prime with DEVTRAN 224HS, BAR-RUST 231, BAR-RUST 231V, BAR-RUST 233H, BAR-RUST 235H, or TRU-GLAZE-WB 4030 epoxy primers, or use PRE-PRIME™ 167 Penetrating Sealer. **Drywall** - Prime with a premium acrylic latex vapor barrier primer-sealer. **Galvanized Steel and Aluminum** - Remove dirt and oils with DEVPREP® 88 cleaner or other suitable cleaner followed by a thorough water rinsing.

Prime with DEVTRAN 203 or TRU-GLAZE-WB 4030 epoxy primers. Galvanized substrates must be test patched for adhesion prior to use due to the high variability of surface treatments. **Choice of primer depends on local VOC and air quality regulations.**

**Shop Applied Coatings:** For coatings applied in shop situations only, depending on the substrate, the following primers may also be used: DEVTRAN 220S, and DEVTRAN 261 QCS epoxy primers. Consult the product data sheets for these primers for the appropriate uses.

**WARNING!** If you scrape, sand, or remove old paint, you may release lead dust. **LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE.** Wear a NIOSH approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to [www.epa.gov/lead](http://www.epa.gov/lead).

## DIRECTIONS FOR USE

**Tinting:** Tint the appropriate base with CHROMA-CHEM® 844 colorants. (Do not use water based or other colorants.) Add colorants to only the base portion. Mix thoroughly before adding the converter portion.

**Thinning:** For compliance to VOC regulations, thin as follows: South Coast Air Quality Management District (SCAQMD): Thinning is not required, however, if thinning is desired, add # 800 VOC Compliant Reducer or T-0 thinner at no more than 10% by volume. Read and follow all hazard and precautionary information found on labels, data sheets and MSDS's. California outside of SCAQMD: Thinning is not required, however, if thinning is desired, add T-0 Thinner at no more than 5% by volume. Small amounts (5% or less) of T-17 thinner will improve roller and brush applications.

**Mixing:** DEVTHANE® 379H enamel is a two component product supplied in 5 gallon or 1 gallon kits which contain the proper ratio of ingredients. The entire contents of each container must be mixed together. It is important that all mixing equipment is free of moisture and that moisture does not contaminate the coating. Mix the base portion to obtain a smooth, homogeneous condition. After mixing the base portion, add the converter slowly with continued agitation. Mix thoroughly. The pot life of the mixed material is 3 hours at 77°(25°C). Higher temperatures will reduce working life of the coating; lower temperatures will increase it. Avoid storing or placing containers in direct sunlight.

**Application:** Apply by airless spray, air spray, roller or brush. For airless spray, any air, electric, or gas operated airless sprayer capable of 3,000 psi (207 bars) and able to support a .011" to .017" tip sizes can be used. Multiple guns and long fluid lines require pumps with adequate capacity. For air spray application, use a professional grade gun; a .070" or larger fluid tip. Adjust fluid and air pressure to get a good spray pattern.

**Note:** Be sure all spray equipment and fluid lines are clean, and free of water or solvents. For brush application, use good quality, dry, clean brushes. For roller application use new, short nap mohair rollers. Do not apply over wet surfaces or under very humid conditions where condensation or fog could settle on the coating during the cure process. Brushing and rolling may require multiple coats to achieve correct film thickness and/or hiding.

**Spreading Rate:** For maximum protection in corrosive areas, apply at 374 sq. ft. per gallon (9.2 m<sup>2</sup>/L) or 3.0 mils (75 microns) dry-4.3 mils (105 microns) wet. In mild to moderate exposures, apply at 561 sq. ft. per gallon (13.77 m<sup>2</sup>/L) or 2.0 mils (50 microns) dry-2.8 mils (70 microns) wet. Make allowance for any losses due to over spray or surface irregularities.

**Dry Time (ASTM D 1640):** At 70°F (21°C) & 50% R.H., dries to recoat in 6 hours and dries hard in 16 hours.

**Clean Up:** Use T-9 thinner, except in the South Coast Air Quality Management District use # 4267 Low VOC Cleaning Thinner or other solvent in compliance with local VOC and air quality regulations.

**Cure Acceleration:** DEVTHANE Cure Accelerator 070A0000 may be used to accelerate cure of this urethane at or below 40°F (5°C). The addition of one to two ounces per gallon of urethane (one to two containers per five gallons of urethane) will decrease the dry hard time approximately one-third to one-half respectively. The pot life will be reduced one-half to three-fourths.

**Ultraviolet Light Stabilizer (UVA):** DEVTHANE Ultraviolet Light Absorber 080A0000 is already contained in DEVTHANE 379H Aliphatic Urethane Gloss Finish. Additional Ultraviolet Light Absorber is not required or desired.

## PRECAUTIONS

**DANGER! FLAMMABLE LIQUID AND VAPOR. HARMFUL OR FATAL IF SWALLOWED. ASPIRATION HAZARD - CAN ENTER LUNGS AND CAUSE DAMAGE. HARMFUL IF INHALED. MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS, INCLUDING DIZZINESS, HEADACHE OR NAUSEA. CAUSES EYE, SKIN AND RESPIRATORY TRACT IRRITATION. MAY CAUSE ALLERGIC SKIN AND RESPIRATORY REACTION. OVEREXPOSURE MAY CAUSE BLOOD, LIVER, KIDNEY DAMAGE. USE ONLY WITH ADEQUATE VENTILATION. KEEP OUT OF THE REACH OF CHILDREN. NOTICE: Products in this series contain solvents.** Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. For emergency information call (800) 545-2643. **Note: These warnings encompass the product series. Prior to use, read and follow product-specific MSDS and label information.** Keep away from heat, sparks and flame. **Do not** smoke. Vapors may ignite. Extinguish all flames, burners, stoves, heaters and pilot lights and disconnect all electrical motors and appliances before use and until all vapors are gone. Prevent build-up of vapors by opening all windows and doors to achieve cross-ventilation. If sanding is done, wear a dust mask to avoid breathing of sanding dust. Do not breathe vapors or spray mist. Ensure fresh air entry during application and drying. Avoid contact with eyes and skin. If you experience eye watering, headaches, or dizziness, leave the area. If properly used, a respirator may offer additional protection. Obtain professional advice before using. Close container after each use. **FIRST AID:** For skin contact, wash thoroughly with soap and water. If any product remains, gently rub with petroleum jelly, vegetable or mineral/baby oil then wash again with soap and water. Repeat as needed. Remove contaminated clothing. For eye contact, flush immediately with plenty of water for at least 15 minutes. **Get medical attention.** If swallowed, **get medical attention immediately.** If inhalation causes discomfort, remove to fresh air. If discomfort persists or breathing difficulty occurs, get medical attention. **KEEP FROM FREEZING.** DS174-1005

## SHIPPING

**Flash Point:** 80°F (27°C)  
**Packaging:** 1 gallon kit (3.785L) 5 gallon kit (18.925L)  
 0.80 gallon base 4.00 gallon base  
 0.20 gallon converter 1.00 gallon converter

**Shipping Weight:** 1 gallon kit - 16 lbs. (7.5 kg)  
 5 gallon kit - 59 lbs. (26.8 kg)

379H (10/07)  
 Ad Stock #67045C

\*CHROMA-CHEM is a Registered Trademark of Evonik Degussa GmbH.



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