

## PRODUCT DESCRIPTION

**Generic:** Polyaspartic Aliphatic Polyurethane

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

**Typical Uses:** For use on properly prepared steel, galvanized, aluminum and properly prepared concrete floors. Ideal for use on exterior or interior structural steel, piping, metal buildings, conveyors, pumps, storage tank exteriors, wind turbine towers, 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.

## SPECIFICATION DATA

**Color:** White base & Custom colors

**Finish:** Gloss

**Reduction Solvent:** T-5 – see Thinning

**Clean-up Solvent:** T-9 or T-5 Thinner

**Weight/Gallon:** 10.74 lbs./gal. (1.29 kg/L) – varies with color

**VOC (EPA 24):** 2.08 lbs./gal. (250 g/L)

**Solids By Volume (ASTM 2697-7 days):** 71%

**Theoretical Coverage at 1.0 Mil (25 microns) Dry:** 1139 sq. ft., (28.0 m²/L)

**Recommended Film Thickness:** 4.0-9.0 mils (100-225 microns) dry – 5.6-12.7 mils (140-318 microns) wet. Direct to metal application requires a minimum dry film thickness of 5-6 mils (125-150 microns)

**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.

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

**Minimum Dry Time (ASTM D 1640):** 4 mils (200 microns) DFT

Substrate Temperature	35°F	60°F	80°F
Dry to Touch	1.5 hours	1 hour	30 minutes
Tack Free	2 hours	1.5 hours	1 hour
Dry Hard	6.5 hours	5 hours	2 hours

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 use of accelerators or force curing may shorten the aged recoat of individual coatings. 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

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

**Mix Ratio By Volume:** 3 (base): 1 (converter) – see mixing instructions.

**Induction:** None

**Pot Life:** 2 hours @ 77°F (25°C) & 50% R.H.

## FEATURES

### Advantages:

- Good gloss and color retention
- Fast dry provides quick return to service
- Low VOC
- Easily applied by brush, roller or spray

## STOP DRAWING REVIEW

THIS DRAWING HAS BEEN REVIEWED FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT ONLY. SUCH REVIEW SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY FOR ERRORS OR OMISSIONS OR OF MEETING THE REQUIREMENTS OF THE PROJECT. NO RESPONSIBILITY IS ASSUMED FOR CORRECTNESS OF DIMENSIONS OR DETAILS.

<input type="checkbox"/>	NO COMMENT
<input type="checkbox"/>	SEE COMMENTS
<input type="checkbox"/>	AMEND & RETAINMENT
<input type="checkbox"/>	REJECTED

Submission No. 80  
Project No. 078107  
By GS  
Date June 29/10

DILLON CONSULTING LIMITED

## PERFORMANCE DATA

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

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

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

**Humidity Resistance:** (ASTM D 2247) – Excellent

**Exterior Exposure:** 45° South Florida – Excellent

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

**Stain Resistance:** (ASTM D 1308 – 1 week contact) Excellent.

## GENERAL SURFACE PREPARATION

All surfaces must be sound, clean, dry, and free of oil, grease, mildew, form release agents, curing compounds, laitance, and other 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.

**New Surfaces: Steel** – For direct to steel application, abrasive blast to near-white metal surface cleanliness in accordance with SSPC-SP-10 or ISO-Sa2 1/2. Blast profile on steel should be 1.5 to 2.0 mils (38-51 microns) in depth and be of a sharp, jagged nature as opposed to a "peen" pattern (from shot blasting) or clean and prime with CATHA-COAT® 302H, DEVTRAN® 224HS, BAR-RUST® 231, BAR-RUST 235, BAR-RUST 233H primers or BAR-RUST 261QC epoxy primer for a fast recoat system.

**Galvanized Steel and Aluminum** – Remove dirt and oils by solvent cleaning or with DEVPREP® 88 Cleaner followed by a thorough water rinsing. Prime with DEVTRAN 201 or 205 epoxy primers. For direct to metal use, brush-off blast in accordance with SSPC-SP-7 to create a surface profile.

**Concrete Floors:** Remove dirt and oils prior to establishing a profile by shot blasting or acid etching the substrate. Prime with BAR-RUST 235, BAR-RUST 231 epoxy primers or BAR-RUST 261QC epoxy primer for faster recoat. For information regarding other primers consult your ICI Paints Representative.

**Previously Painted Surfaces:** Remove loose and peeling paint. Scuff sand glossy areas. Old coatings should be tested for lifting and bleeding. If they lift or bleed, remove them. Prime bare areas with a primer specified under New Surfaces.

**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:** Thinning is not normally required. However, depending on local VOC and air quality regulations, small amounts (5% or less) of T-5 Thinner may be added. Small amounts (5% or less) of T-17 Thinner may improve roller, brush or spray application on hot substrates. If local VOC and/or air quality regulations are not an issue, and depending on the individual set-up of the spray equipment, additional thinning may be allowed to obtain the desired individual finish.

**Mixing:** DEVTHANE® 349QC is a two component product. The entire contents of each container must be mixed together. Power mix the base portion first to obtain a smooth, homogeneous condition. After mixing the base portion, add the converter slowly with continued agitation. After the converter add is complete, continue to mix slowly. Always restir before use. Mixed material is usable for 2 hours @ 77°F. Skinning may occur if not mixed periodically. Higher temperatures and excessive moisture will reduce the working life of the coating.

**Application:** Apply by airless spray, air spray, roller or brush. For airless spray, any air assisted, electric, or gas operated airless sprayer capable of 3,000 psi (207 bars) and able to support a .015" to .019" tip sizes can be used. Minimum 3/8" fluid line is required. Multiple guns and long fluid lines require pumps with adequate capacity. For air spray application, use a professional grade conventional gun with a .070 fluid tip or larger. Adjust fluid and air pressure to get a good spray pattern. Brushing and rolling may require multiple coats to achieve correct film thickness and/or hiding.

**Note:** Be sure all spray equipment and fluid lines are clean, and free of water or non-compatible solvents. For brush application, use good quality, dry, clean brushes. For roller application, use short nap, new 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.

**Spreading Rate:** Apply at 127-285 sq. ft. per gallon (3.1-7.0 m<sup>2</sup>/L) depending on surface texture and porosity. Make allowance for any losses due to overspray or surface irregularities.

**Dry Time:** At 77°F (25°C) & 50% R.H., dries hard in 2 hours.

**Clean-up:** Use T-9 or T-5 Thinner.

## PRECAUTIONS

**DANGER! FLAMMABLE LIQUID AND VAPOR. CAUSES EYE AND SKIN BURNS. 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 RESPIRATORY TRACT IRRITATION. MAY CAUSE ALLERGIC SKIN AND RESPIRATORY REACTION. OVEREXPOSURE MAY CAUSE BLOOD, LIVER, KIDNEY DAMAGE. CONTAINS CRYSTALLINE SILICA WHICH CAN CAUSE LUNG CANCER AND OTHER LUNG DAMAGE IF INHALED. 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:** In case of skin contact, wash thoroughly with soap and water. If any product remains, gently rub petroleum jelly, vegetable or mineral/baby oil onto skin, then wash again with soap and water. Repeated applications may be needed. Remove contaminated clothing. For eye contact, flush immediately with large amounts of water, for at least 15 minutes. Obtain emergency medical treatment. If swallowed, obtain medical treatment immediately. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs, get medical help. **KEEP FROM FREEZING.**

05161-1003

## SHIPPING

Flash Point: 80°F (27°C)  
Packaging: 4 gallon kit (15.14L)  
3 gallon base  
1 gallon converter

Shipping Weight: 4 gallon kit - 49 lbs. (22.3kg)

349BXXXX / 349C0910 (5/05)  
Ad Stock #68531B

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HIGH PERFORMANCE

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