DIAMOND TUFF

INDUSTRIAL COATINGS ACRYLIC/ALIPHATIC POLYURETHANE GLOSS ENAMEL

A high performance industrial two (2) component aliphatic urethane coating, specially formulated to provide outstanding durability and unsurpassed chemical resistance in a variety of interior and exterior commercial and industrial environments. Its special formulation provides excellent resistance to abrasion, industrial chemical cleaners, and impact abuse. It provides excellent protection against alkali attack, acids and salt water sprays, offers excellent hardness and durability, an excellent high gloss finish that is fade resistant, and its performance qualities that far exceed that of conventional type coatings such as, alkyd enamels or industrial air dry enamels.

PERFORMANCE QUALITY CHECKLIST:

PRODUCT QUALITY	FINISH / GLOSS	APPLICATION	SYSTEM	PRODUCT USE
Premium Best	Flat	✔ Brush	100% Acrylic	Interior
Superior	Eggshell/Lo-Lustre	✔ Roller Cover	Acrylic Latex	Exterior
Professional	Satin	✔ Airless Spray	Alkyd/Oil	✔ Interior/Exterior
✔ Industrial	Semi-Gloss	✔ Conventional Spray	✔ Special	
Economy	✔ Gloss			

PRODUCT FEATURES

- Acrylic/Aliphatic Polyurethane
- Excellent Coverage
- Excellent Durability
- Rust Inhibitive
- Chemical Resistant
- Corrosion Resistant
- Moisture & Alkali Resistant
- High Performance
- Chemical Resistant
- Impact Resistant

RECOMMENDED USES

- Structural Steel
- Iron
- Galvanized Metals
- Gypsum Drywall
- Plaster
- Interior Wood
- Storage Tanks
- Concrete & Masonry
- Floors
- Farm Equipment
- Machinery
- Fiberglass
- Ceramic Tiles
- Oil Refineries

RECOMMENDED PRIMER COATINGS

Although formulated to be self-priming on sound and properly prepared painted surfaces, the following Richard's primers are recommended for use on new or bare substrates;

- **New Gypsum Drywall / Plaster:**
  - Self-Priming
  - 100% Acrylic Primer/Sealer
- **New Masonry:**
  - Self-Priming
  - 100% Acrylic Primers
  - Industrial Solvent Epoxy Gray/White Primers
- **New Non-Ferrous, Aluminum & Galvanized Metal:**
  - Self-Priming
  - 100% Acrylic DTM Primers
  - Industrial Universal Primer
- **New Ferrous Metal:**
  - Industrial Universal Primer
  - Industrial Solvent Epoxy Gray/White Primers
- **Previously Painted Surfaces:**
  - Self-Priming

SURFACE PREPARATION

GENERAL

- All surfaces must be sound, dry, clean and free of oil, grease, dirt, mildew, scale, form release agents, curing compounds, loose and flaking paint, rust, efflorescence and any other surface contaminants.
- Surface areas affected by mildew should be treated with a commercial mildew removal and/or wash product carefully following manufacturer's application and safety directions. Rinse thoroughly with clean water, and allow a minimum of 24 hours to dry thoroughly.

NEW SURFACES

- **Concrete & Masonry –** All new masonry surfaces must be allowed to dry/cure a minimum of 30 days before painting. Acid etch or abrasive blast all slick, glazed concrete or concrete with laitance.
- **Galvanized & Non-Ferrous Metals –** Solvent clean the surface in accordance with SSPC-SP1 Solvent Cleaning specifications for metal surfaces. If any oxidation (white rust) has formed, remove as per SSPC-SP2 Hand Tool Cleaning, SSPC-SP3 Power Tool Cleaning specifications for metal surfaces.
- **Steel & Ferrous Metals –** Remove any loose rust, mills scale or rust deposits from metal surfaces by the methods described above, and in accordance with the Steel Structures Paint Council specifications SSPC-SP1 Solvent Cleaning, SSPC-SP2 Hand Tool Cleaning, SSPC-SP3 Power Tool Cleaning, and SSPC-SP6 Commercial Blast Cleaning methods for proper surface preparation of metal surfaces

PREVIOUSLY PAINTED SURFACES

- Remove any loose scale, chalked, cracked or peeling paint from previously painted surfaces by hand scraping, sanding, wire brushing or by power tool cleaning methods, such as electric sanders, grinders, etc.
- Previously painted surfaces that are in poor condition should be completely stripped to reveal a more compatible surface for paint application. Sand smooth all rough paint edges to the adjacent surface area, and sand all glossy surfaces to effectively dull existing sheen levels.
- Repair/replace any damaged, deteriorated, and surface imperfections with the proper patching compounds or building materials. Prime all bare, new, chalked, and repaired surfaces with the properly specified Richard's primer.

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 wet mop. Before you start, find out how you can protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-Lead, or log onto www.epa.gov/lead.

TECHNICAL DATA

- **COLORS:** White & Tinting Bases
- **TINTING:** Industrial Colorants Only
- **VEHICLE TYPE:** Aliphatic Polyurethane
- **VISCOSITY:** 93 KU ± 3
- **FINISH:** High Gloss / 85 units +
- **FLASH POINT:** 93º F
- **COATING VOC:**
  Not to Exceed 450 g/l – 3.78 lb/gal
  (*Meets AIM Standards*)
- **SOLIDS:** By Volume: 52.75% ± 2%
  By Weight: 67.70% ± 2%
- **ESTIMATED COVERAGE:**
  300 – 400 Square Feet Per Gallon
  (*Coverage will vary significantly depending on application method, surface porosity and condition of the surface.*)
- **RECOMMENDED MIL FILM:**
  Wet - 4.6 mils
  Dry - 2.4 mils
  (*Estimated @ 350 Square Feet Per Gallon.*)
- **ESTIMATED DRY TIME:**
  To Touch: 30 Minutes
  Recoat: 2 - 4 Hours
  Full Cure: 5 - 7 Days
  (*Dry times listed may vary according to relative humidity, temperature, film build, color & air movement.*)
- **CLEAN UP:** Urethane Thinner
- **THINNING:** Urethane Thinner
- **WEIGHT PER GALLON:** 11.27 lbs.
- **PACKAGING:**
  Quarts: N/A Gallons: 4/case
  2 Gallons: N/A 5 Gallons: N/A

PRODUCT APPLICATION – GENERAL

Diamond Tuff Industrial Coatings Acrylic/Aliphatic Polyurethane Gloss Enamel may be easily applied with a quality brush, roller cover, or spray equipment as follows;

- Mix Part A & B components as stated in the Mixing Instruction Section below.
- Stir thoroughly in a spiral up and down motion before and during application to keep product completely mixed.
- For best results, it is recommended to apply two (2) finish coats.
- To assure color uniformity always intermix multiple containers of custom tinted and stock colors. Apply a small test sample to verify color.
- Always paint to a natural break in the surface, such as a corner or edge.
- When applying by brush, apply a smooth and generous coat on smaller surface areas, such as cutting-in larger surfaces and painting trim.
- When applying by roller cover, apply an even and generous coat in a **"W"** or crisscross motion, avoiding any excessive respreading or reworking.
- When applying by airless spray equipment, use a unit with a minimum of 2000 psi of pressure, with a 0.013 – 0.015 fluid spray tip.
- During spray application, it is recommended to back-roll the surface area to ensure proper adhesion, and an even coat application.
- Maintain a wet edge during application by brushing, rolling or spraying into previously applied coating area.
- Apply when surface and ambient temperatures are above 55º F and below 90º F.
- Avoid exterior paint application when weather conditions are threatening, and late in the day when there is a threat of moisture condensing on wet paint.
- ***Special Note:* All new concrete and masonry surfaces should be allowed to dry/cure for at least 30 days before painting. Prolonged exposure to direct sunlight will cause finish to fade & chalk. As with most epoxy coatings, some yellowing of the paint film may occur.**

PRODUCT LIMITATIONS

- Not for use in areas subject to intense heat.
- Not for use on below grade surfaces.

MIXING INSTRUCTIONS

Industrial Coatings Acrylic/Aliphatic Polyurethane Gloss Enamel is formulated as a 4 to 1 ratio mix, example - 1 full gallon of part A mixed with 1 quart of part B.
Stir both Part A component thoroughly with a paint paddle in a spiral up and down motion or with an electric mixer. In a separate container, mix both Parts A & B components and stir thoroughly. **There Is No Induction Period!** Mixed material has a 6 to 8 hour pot life after combining, and should be applied during this time period. **Neither Component Will Work Unless Mixed With The Other!** When tinting, use 844 Industrial Colorant only. **Tint part A component only**.

CLEAN UP & THINNING

- **Clean Up:** Clean up any minor spills and spatters immediately with a Urethane Brushing Thinner, as well as all painting tools and airless equipment. More serious paint spills should be contained and removed with inert absorbent material. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state and federal regulations.
- **Thinning:** Stir thoroughly and apply as it comes from the container. Thinning is not necessary. However, if thinning is required, you may add a Urethane Brushing Thinner, or a Urethane Spraying Thinner.

PRECAUTIONARY & SAFETY INFORMATION

DANGER: FLAMMABLE! CONTAINS ETHERS, ESTER SOLVENTS, ACRYLIC RESIN & XYLOL! KEEP OUT OF REACH OF CHILDREN! Keep away from heat, sparks and open flames. **INSURE PROPER CROSS-VENTILATION UNTIL COATING HAS DRIED!** Turn off main gas valve until after the coating has dried, then have pilot lights re-lighted by a responsible person. Where ventilation is inadequate, use a suitable respirator. Avoid prolonged contact with skin and breathing of vapors and/or spray mists. When spraying this material, use an **OSHA** approved cartridge respirator. Use chemical safety glasses, goggles, or a face shield for proper eye protection. Wash thoroughly after handling and before eating or smoking. Close container after each use.
DO NOT TAKE INTERNALLY!
FIRST AID: In case of skin contact, wash thoroughly with plenty of warm soapy water. For eye contact, flush with plenty of water for 15 minutes, **SEEK IMMEDIATE MEDICAL ATTENTION!** If affected by inhalation, move immediately to fresh air. If swallowed, **DO NOT INDUCE VOMITING, SEEK IMMEDIATE MEDICAL ATTENTION!**
NOTICE: 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 herein may be harmful or fatal.

WARRANTY & LIMITATIONS

REV 04-17