

# LPU Marine TECHNICAL DATA

## Two Part Linear Polyester Poly-Urethane Coating

**High Durability Top Coat**  
**No Fade**  
**Barrier Coat over Other Coatings**  
**Protective Coating**

**Excellent Corrosion Resistance**  
**Easy Two Component Formulation**  
**Not For Immersion Surfaces**  
**VOC Class: Mobile Equipment VOC = 372 g/l**

<p><b>STANDARD PRODUCT DESCRIPTION</b></p>	<p>A two component, aliphatic isocyanate Polyurethane coating. This special formulation is used to impart the highest chemical resistance, gloss and color retention of a polyurethane coating, yet retain the outstanding tough, m abrasive film which provides excellent exterior durability, chalk resistance, color stability and long term gloss retention. Ideal as a topcoat for concrete and steel structures.</p> <p>With few exceptions, polyurethanes should be used over a primer - that primer being either an epoxy or our moisture cured urethane (Aluthane), Fiberglass boat hulls in good condition can get by without a primer.</p>
<p><b>USES</b></p>	<p>LPU Marine is a premium yacht topside coating. It is also recommended as a topcoat for warehouse floors, aircraft hanger floors, structural steel, tanks, vessels, water tanks, etc., in chemical processing plants, pulp and paper mills, sewage and waste water treatment facilities, fertilizer plants, petroleum refineries, electric generating stations, coal handling operations, marine installations, etc.</p>
<p><b>FEATURES</b></p>	<p>This special formulation is used to impart the highest chemical resistance, gloss and color retention of a polyurethane coating, yet retain the outstanding tough, abrasive resistant film which provides excellent exterior durability, chalk resistance, color stability and long term gloss retention. Ideal as a topcoat for fiberglass and steel structures.</p>
<p><b>PHYSICAL PROPERTIES</b></p>	<p>COLOR ..... White          60° gloss ..... 90 ± 5%          VOLUME SOLIDS: ..... 60 ± 3%          COVERAGE ..... 300 - 400 sq. ft. per gallon          RECOMMENDED FILM THICKNESS: . 2 - 3 dry mils per coat @ 320-480 sq. ft. per gallon          MIXING RATIO ..... 2:1 by volume (base:curing agent); 1:0.55 by weight          APPLICATION TEMPERATURE ..... 50° F to 100° F dry          APPLICATION METHOD ..... Roller, spray or lambswool applicator          INDUCTION TIME: ..... None          MAXIMUM HARDNESS ..... 7-10 days          V.O.C. .... 3.1 lbs/gal (372 gms/liter)          SHELLFLIFE ..... 1 year minimum when stored @ 50°F - 90°F inside          POT LIFE ..... 6 hours at 75°F. At 90°F potlife is reduced to 4 hours          DRY TIME @ 75° F: ..... To touch - 2 hours, recoat - 8 hours, foot traffic - 24 hours          DRY SERVICE TEMP: ..... 300° F</p>
<p><b>SURFACE PREPARATION</b></p>	<p>LPU Marine is a top coat and is not recommended directly over unprimed surfaces. Do not apply over aged coating without sanding and apply an epoxy primer coat (Low V epoxy) or Urethane primer (Aluthane). The existing coating must be sound and have an excellent adhesion to the substrate. Surfaces must be free from all oil, grease, water or other foreign matter. Surface should be dry, sound and above 50°F. Relative humidity should not exceed 85%. Do not apply if surface temperature is within 5°F of the dew point. Apply only in good weather, LPU Marine is moisture sensitive during application and initial care.</p> <p>Stir each component to a uniform consistency by using an explosion proof variable speed drill with a 'Jiffy'</p>

**SOLVENT-FREE COATINGS FOR TOUGH ENVIRONMENTS**

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<b>MIXING INSTRUCTIONS</b>	<p>mixer. Make sure any pigment settled to the bottom is incorporated. <b>DO NOT</b> vary proportions. Thoroughly mix 2 parts Base (Part A) to 1 part Curing Agent (Part B).</p>																																							
<b>APPLICATION</b>	<p>An induction time after mixing is not necessary, but some users report better handling properties if they let the mixture sit for 15-30 minutes before application. The paint has application characteristics of thinned oil-based enamel (and goes on very thin). Because of the thinness of each coat, 2 or 3 coats are recommended both to increase coating thickness and the hiding characteristics of the pigmented urethane. Recoat window is 6 to 16 hours. Beyond that, sand lightly. Solvent odor is noticeable but not overpowering. The coating will become dry overnight, hard in about 3 days, with maximum hardness in 7-10 days. Product has low viscosity, but if thinning is desired, the product formulator recommends using approved two-part urethane solvents. These include: Interlux 2333N (slow evaporating solvent) through Boat US 1-800-937-2680) or West Marine 1-800-BOATING. A good quality brush and/or the addition of reducer/thinner will reduce brush marks.</p> <p>Best method of application is conventional or airless spray. Flush equipment thoroughly with MEK solvent before using and use a moisture trap on the air supply.</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 10%;">1. Airless Spray</td> <td style="width: 40%;">Graco</td> <td style="width: 50%;">Binks</td> </tr> <tr> <td>  Gun</td> <td>205 - 591</td> <td>Model 500</td> </tr> <tr> <td>  Pump</td> <td>Bulldog 30:1</td> <td>Mercury 5C-30:1</td> </tr> <tr> <td>  Tip Range</td> <td>.011 to .015</td> <td>.011 to .015</td> </tr> <tr> <td>  Hose</td> <td>3/8 inch ID</td> <td>3/8 inch ID</td> </tr> <tr> <td>  Pressure</td> <td>1500 - 1800 psi</td> <td>1500 - 1800 psi</td> </tr> <tr> <td>2. Conventional Spray</td> <td>DeVilbiss</td> <td>Binks</td> </tr> <tr> <td>  Gun</td> <td>MBC or JGA</td> <td>#18 or #62</td> </tr> <tr> <td>  Fluid Tip</td> <td>E</td> <td>66</td> </tr> <tr> <td>  Air Cap</td> <td>704 or 765</td> <td>66 PE</td> </tr> <tr> <td>  Atomizing Pressure</td> <td>60 psi</td> <td>60 psi</td> </tr> <tr> <td>  Pot Pressure</td> <td>15 - 20 psi</td> <td>15 - 20 psi</td> </tr> <tr> <td>  Hose</td> <td>1/2 inch ID</td> <td>1/2 inch ID</td> </tr> </table> <p>When spraying use a 50% overlapping crosshatch pattern to minimize the occurrence of pinholes.</p> <p>3. Rolling. Allow 15 minutes induction time. Use a 1/4" phenolic mohair shed resistant roller cover. Pour material in a ribbon along the floor. Roll in the same direction, always keeping a wet edge. Do not over roll product. For safety and product curing, proper ventilation is necessary throughout application and cure.</p>	1. Airless Spray	Graco	Binks	Gun	205 - 591	Model 500	Pump	Bulldog 30:1	Mercury 5C-30:1	Tip Range	.011 to .015	.011 to .015	Hose	3/8 inch ID	3/8 inch ID	Pressure	1500 - 1800 psi	1500 - 1800 psi	2. Conventional Spray	DeVilbiss	Binks	Gun	MBC or JGA	#18 or #62	Fluid Tip	E	66	Air Cap	704 or 765	66 PE	Atomizing Pressure	60 psi	60 psi	Pot Pressure	15 - 20 psi	15 - 20 psi	Hose	1/2 inch ID	1/2 inch ID
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<b>LIMITATIONS</b>	<p>LPU Marine is flammable. Keep away from all sources of ignition during mixing, application and cure. Contains Aliphatic Polyisocyanates, N-Butyl Acetate, Xylene and PM Acetate. The use of goggles, fresh air masks or NIOSH approved respirators, m protective skin cream and protective clothing is a recommended standard practice when spraying.</p>																																							
<b>TRANSPORT</b>	<p>Hazardous for shipping.</p>																																							

**SAFETY:** This is a hazardous material if misused. Read and understand the Material Safety Data Sheet (MSDS) before use.

**WARRANTY DISCLAIMER:** The technical data given herein has been compiled for your help and guidance and is based upon our experience and knowledge. However, as we have no control over the use to which this information is put, no warranty, express or implied is intended or given except that these goods shall be of merchantable quality and buyer assumes all risk and liability for results obtained by the use of the materials covered in this data sheet, whether used singly or in combination with other products. Users are urged to make their own test to determine the suitability for their particular conditions. We assume no responsibility whatsoever for coverage, performance or damages, including injuries resulting from use of this information or of products recommended herein. The sale and use of this product is governed by Progressive Products, Inc.'s Warranty Disclaimer and Return Policy.

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GCPM in AL

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# LPU Marine TECHNICAL DATA

## CHEMICAL RESISTANCE (Splash & Spill Testing)

Antifreeze	Gasoline, Premium	Olive Oil
Barium Sulfate	Gasoline, Unleaded	Orange Juice
Beer	Glucose	Peanut Oil
Brake Fluid	Grape Juice	Potassium Hydroxide
Brine	Glycerin	Power Steering Fluid
Citric Acid = 10%	Hydraulic Fluid	Rum
Corn Oil	Jet Fuel, JP-4, JP-5	Sea Water
Cutting Oil	Kerosene	Skydrol 500 B
Crude Oil	Ketchup	Sodium Hydroxide - 20%
Diesel Fuel	Lactic Acid - 10%	Soybean Oil
Distilled Water	Lard	Sulfuric Acid - 10%
Ethylene Oxide	Linseed Oil	Tannic Acid
Ethanol	Milk	Vegetable Oil
Ethylene Glycol	Mineral Oil	Vodka
Fuel Oil	Mineral Spirits	Whiskey
Gasoline, Aviation	Molasses	Wine
Gasoline, Regular	Motor Oil	

## PHYSICAL PROPERTIES CHART

<p><b>Abrasion Resistance</b>                      Method: ASTM D4060, CS 17 wheel, 1000 cycles, 1 KG Load                      Result: 28 mg 5 Trials</p>
<p><b>Adhesion Cross Cut</b>                      Method: D4541                      Result: 500 PSI Minimum</p>
<p><b>Dry Heat Resistance</b>                      Method: ASTM D2485                      Result: 300°F</p>
<p><b>Flexibility: Conical Bend Mandrel</b>                      Method: ASTM D522, 180° Bend                      Result: Passes 1/8"</p>
<p><b>Impact Resistance</b>                      Method: ASTM D2794                      Result: Direct - 160 in. lb.                      Result: Reverse - 140 In. lb</p>
<p><b>Pencil Hardness</b>                      Method: ASTM D3363                      Result: 3 H</p>
<p><b>Salt Fog Resistance</b>                      Method: ASTM B117                      Result: Passes 1000 hrs</p>
<p><b>Sward Hardness</b>                      Method: D2134                      Result: 68</p>

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