



Commercial Performance Coatings

AU3-L301 W/UA-11 ACCELERATOR

CPC 62

Low VOC Polyurethane – Slate Gray

PRODUCT DESCRIPTION		
AU3-L301 LOW VOC POLYURETHANE -SLATE GRAY Component A	AUE-421 URETHANE CATALYST Component B (Clear curing Agent)	UA-11 URETHANE ACCELERATOR Component C
<p>TYPE: Polyurethane</p> <p>RECOMMENDED USE AU3-L301 is recommended for Caterpillar® Slate Gray equipment components required to pass Caterpillar's 1E1950L high performance paint specification. Metal surfaces should be primed with a PPG Caterpillar-approved primer. (See surface prep. chart) Suitable applications include Caterpillar out-source metal fabrication shops, castings, drive assemblies and hydraulic components</p> <p>AU3-L301 meets all the color match, color consistency, color retention, film durability and quality control properties associated with the 1E1950L specification. When applied according to directions, AU3-L301's unique formulation results in a hard, smooth, high gloss finish that presents a quality image.</p> <p>AU3-L301 is easy to mix and apply, has a good working pot life, and dries quickly to improve productivity in high volume Caterpillar outsource operations. Once formulated, batches as small as one gallon can be reproduced time after time without the color drift problems associated with manual small batch methods.</p> <p>COLOR: Caterpillar-approved Slate Gray</p>		

PERFORMANCE FEATURES	PHYSICAL CONSTANTS																																																																								
<p>AU3-L801 Slate Gray meets or exceeds all requirements for Caterpillar Specification 1E1951L high performance topcoat.</p> <table border="1"> <thead> <tr> <th colspan="2">1E1951L Specification</th> <th>AU3-L301</th> </tr> </thead> <tbody> <tr> <td>Pencil Hardness</td> <td>F-minimum</td> <td>Pass</td> </tr> <tr> <td>Adhesion</td> <td>4 minimum</td> <td>Pass</td> </tr> <tr> <td>Conical Mandrel</td> <td>20% minimum</td> <td>Pass</td> </tr> <tr> <td>Salt spray exposure</td> <td>750 hours</td> <td>Pass</td> </tr> <tr> <td>Scribed Panel</td> <td>8 minimum</td> <td>Pass</td> </tr> <tr> <td>Unscribed Panel</td> <td>9 minimum</td> <td>Pass</td> </tr> <tr> <td>Fluid Immersion Resistance</td> <td></td> <td></td> </tr> <tr> <td>Distilled Water</td> <td>500 hours</td> <td>Pass</td> </tr> <tr> <td>Diesel Fuel</td> <td>500 hours</td> <td>Pass</td> </tr> <tr> <td>Oil 10W-30W</td> <td>500 hours</td> <td>Pass</td> </tr> <tr> <td>Color and Gloss Retention</td> <td></td> <td></td> </tr> <tr> <td>Xeron Arc Weather-o-meter</td> <td>ΔE less than</td> <td>Pass</td> </tr> <tr> <td>a. Color</td> <td>1.25</td> <td>Pass</td> </tr> <tr> <td>b. Gloss</td> <td>20°= 55%</td> <td>Pass</td> </tr> <tr> <td></td> <td>60°= 85%</td> <td></td> </tr> <tr> <td>Florida 1 Year exposure</td> <td></td> <td></td> </tr> <tr> <td>Xenon Arc Weather-o-meter</td> <td>ΔE less than</td> <td>Pass</td> </tr> <tr> <td>a. Color</td> <td>1.25</td> <td>Pass</td> </tr> <tr> <td>b. Gloss</td> <td>20°= 55%</td> <td>Pass</td> </tr> <tr> <td></td> <td>60°= 85%</td> <td></td> </tr> </tbody> </table> <p>SHEEN AUE-L301 Low VOC Polyurethane enamel is supplied as a gloss finish (80 - 90 on a 60° gloss meter).</p>	1E1951L Specification		AU3-L301	Pencil Hardness	F-minimum	Pass	Adhesion	4 minimum	Pass	Conical Mandrel	20% minimum	Pass	Salt spray exposure	750 hours	Pass	Scribed Panel	8 minimum	Pass	Unscribed Panel	9 minimum	Pass	Fluid Immersion Resistance			Distilled Water	500 hours	Pass	Diesel Fuel	500 hours	Pass	Oil 10W-30W	500 hours	Pass	Color and Gloss Retention			Xeron Arc Weather-o-meter	ΔE less than	Pass	a. Color	1.25	Pass	b. Gloss	20°= 55%	Pass		60°= 85%		Florida 1 Year exposure			Xenon Arc Weather-o-meter	ΔE less than	Pass	a. Color	1.25	Pass	b. Gloss	20°= 55%	Pass		60°= 85%		<p>IN SERVICE TEMPERATURE LIMITATIONS 300°F Note: As you approach 300°F, the color may change, but film integrity will be maintained until 300°F.</p> <p>WATER RESISTANCE Resistant to intermittent exposure. Not recommended for immersion.</p> <p>WEIGHT PER U.S. GALLON (MIXED) 8.69 lb./gal</p> <p>PERCENT SOLIDS BY WEIGHT (MIXED) 62.04%</p> <p>PERCENT SOLIDS BY VOLUME (MIXED) 54.23%</p> <p>FLASH POINTS</p> <table> <tr> <td>AU3-L301</td> <td>Pensky-Martens</td> <td>99°F (37°C)</td> </tr> <tr> <td>AUE-421</td> <td>Pensky-Martens</td> <td>80°F (27°C)</td> </tr> <tr> <td>UA-11</td> <td>Pensky-Martens</td> <td>96°F (36°C)</td> </tr> </table> <p>VOC (MIXED) <3.5 lb./gal</p>	AU3-L301	Pensky-Martens	99°F (37°C)	AUE-421	Pensky-Martens	80°F (27°C)	UA-11	Pensky-Martens	96°F (36°C)
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<p>READY TO SPRAY VISCOSITY (varies by color) #3 Zahn 13-16 seconds #2 Zahn 45 – 55 second</p>																																																																									

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SURFACE PREPARATION

The surface to be coated must be sanded, free of all contamination, including dust, dirt, oil, grease and oxidation. Chemical treatment or the use of a conversion coating will improve the adhesion and performance properties of the finished coat.

Metal	Recommended Primers	Direct To Properly Treated Substrate
Cold Rolled Steel	EPX-900, HSP-2128	Excellent
Hot Rolled Steel	EPX-900, HSP-2128	Excellent
Galvanized	EPX-900, HSP-2128	Fair
Galvaneal	EPX-900, HSP-2128	Fair
Aluminum	EPX-900, HSP-2128	Good
Plastic/Fiberglass	Surface should be free of all contamination. Because of the variability of plastic/fiberglass substrates, coating performance should be confirmed on the actual plastic/fiberglass substrate being used.	

APPLICATION DATA

MIXING DIRECTIONS

Stir thoroughly before and occasionally during use. Mix ratio is **4 parts** component A to **1 part** component B by volume **plus 6 oz.** UA-11. Agitate thoroughly and allow it to digest 15 minutes before using. NOTE: moisture contamination in components can result in poor properties of applied films or gelling of the material. Do not open until ready to use.

THINNING

Not recommended in VOC compliance areas.

POT LIFE

77°F (25°C) 2 to 2 1/2 hours

Note: Higher temperatures will shorten pot life.

RECOMMENDED WET FILM BUILD

Spray Application: 2.7 - 4.0 mils

RECOMMENDED DRY FILM BUILD

Spray Application: 1.5 - 2.0 mils

APPLICATION EQUIPMENT

Conventional Spray: 50-60 psi at the gun.

DRYING TIME

3 mils wet at 77°F (25°C) and 50% relative humidity.

To Touch: 1 hour (depending on temperature)

To Handle: 4 hours*

Dry: 24 hours**

Recoat: 16 hours to 1 week

Force Dry: (allow 10 minutes air dry)

Bake: 10 minutes @ 180 °F

Bake: 20 minutes @ 160 °F

* This condition does not mean that the paint film has reached full cure. It is a stage where handling can be achieved without loosening, wrinkling or otherwise marring the film under minimal pressure from fingers or hands. Drying time listed may vary, depending upon film build, color selection, temperature, humidity and degree of air movement.

** Paint film is not fully cured for 7 days.

Application of film thickness in excess of that recommended for this product will substantially extend dry time and lengthen the recoat window. Film in excess or below these recommended film builds may cause problems such as, adhesion failure, solvent popping, slow cure, or premature gloss and color loss.

RECOMMENDED SPREADING RATE

870 sq. ft. at 1.0 mil dry film per U.S gallon. Coverage figures do not include losses due to mixing, transfer or application of coating or losses due to surface irregularities or porosity.

CLEAN UP

PPG Urethane Reducer or Xylene

APPLICATION PRECAUTIONS AND LIMITATIONS

Apply only when air, product or surface temperature is above 50°F (10°C) and when surface temperature is at least 5°F (3°C) above the dew point.

All Commercial Coatings Performance data is based on spray application at the recommended film build. If alternative application methods are employed, substrate preparation and film builds listed for spray application must be followed.

To the best of our knowledge, the technical information in this bulletin is accurate; however, since PPG Industries, Inc. is constantly improving its coatings and paint formulas, the current technical data may vary somewhat from what was available when this bulletin was printed. Contact your PPG Distributor for the most up-to-date information

SAFETY

These materials are designed for application only by professional, trained personnel, using proper equipment under controlled conditions and are not intended for sale to the general public. Safe application of paints and coatings requires knowledge of equipment materials and individual training. Directions and precautionary information on both equipment and products should be carefully read and strictly observed for personal safety and property protection. Consideration must be given to eliminate conditions, which may generate hazardous atmospheres during spray application or subject operators or bystanders to injury or illness. Special precautions must be taken when utilizing spray equipment, particularly airless equipment. High-pressure injection of coatings into the skin by airless equipment may cause serious injury requiring immediate medical attention at a hospital. Treatment advice may also be obtained from Poison Centers. Air quality should be maintained with adequate ventilation; applicators can achieve additional protection by wearing respirators and other protective garments such as gloves and overalls. In all cases, wear protective eye equipment. During the application of all coatings materials, all flames, welding and smoking must be prohibited. Explosion proof equipment must be used when coating these materials in confined areas.

PRECAUTIONARY INFORMATION

Before using the products listed herein, carefully read each product label and follow directions for its use. Please read and observe all warnings and precautionary information on all product labels. Prevent all contact with skin and eyes and breathing of vapors and spray mist. Repeated inhalation of high vapor concentrations may cause a series of progressive effects including irritation of the respiratory system, permanent brain and nervous system damage and possible unconsciousness and death in poorly ventilated areas. Eye watering, headaches, nausea, dizziness and loss of coordination are indications that solvent levels are too high. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

KEEP OUT OF THE REACH OF CHILDREN

MEDICAL RESPONSE

Emergency Medical or Spill Control Information (412) 434-4515. CANADA (514) 645 - 1320 Have label information available. MATERIAL SAFETY DATA SHEET Material Safety Data Sheets for the PPG products mentioned in this publication are available through your PPG Distributor. FOR ADDITIONAL INFORMATION REGARDING THIS PRODUCT, SEE THE MSDS AND LABEL INFORMATION.

PPG Industries
Commercial Coatings

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