



Commercial Performance Coatings

AUE-280

CPC 49

2.8 VOC Polyurethane Enamel

| PRODUCT DESCRIPTION | | | |
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| AUE-280 2.8 VOC POLYURETHANE ENAMEL Component A (Pigmented) | | AUE-281 CATALYST FOR AUE-280 Component B (Clear curing agent) | |
| | | UA-11 URETHANE ACCELERATOR UE-28 URETHANE EXTENDER Component C | |
| TYPE: Polyurethane | | | |
| RECOMMENDED USE | | | |
| AUE-280 2.8 VOC Polyurethane Enamel is recommended for interior and exterior use on properly prepared and or primed metal surfaces. Suitable applications include metal fabrication, castings, cabinets, machinery, and heavy equipment. | | | |
| AUE-280 2.8 VOC Polyurethane Enamel provides a wide balance of performance properties, including excellent flow and leveling, film hardness and good exterior durability. | | | |
| COLORS: Virtually any new or existing color standard can be quickly and precisely matched using PPG's COLOR ACCURATE™ instrument matching and dispensing system. 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. All colors supplied from the COLOR ACCURATE™ system will be formulated to meet Federal standards concerning the amount of lead in the dried film. | | | |
| Note: Some colors may exceed 2.8 Voc depending on the color formula. | | | |
| PHYSICAL CONSTANTS | | | |
| WEIGHT PER U.S. GALLON (MIXED) (varies by color) 8.6 - 9.9 lbs/gal. | | FLASH POINTS | |
| PERCENT SOLIDS BY WEIGHT (MIXED) (varies by color) 68 % - 75% | | AUE-280 | Pensky-Martens 109°F (43° C) |
| PERCENT SOLIDS BY VOLUME (MIXED) (varies by color) 62 % - 66 % | | AUE-281 | Pensky-Martens 389°F (198°C) |
| | | UA-11 | Pensky-Martens 96°F (36° C) |
| | | UE-28 | Pensky-Martens 96°F (36° C) |
| | | VOC | 2.8 lb/g |
| READY TO SPRAY VISCOSITY (varies by color) #3 Zahn 15-25 seconds #2 Zahn N/A | | | |
| PERFORMANCE FEATURES | | | |
| PENCIL HARDNESS 2B-HB (varies by color) | | SHEEN | |
| FLEXIBILITY (Conical mandrel) Excellent | | AUE-280 Polyurethane enamel is supplied as a gloss finish (80-90 on a 60° gloss meter). | |
| FADE RESISTANCE Exposure studies confirm that the fade resistance of the AUE-280 Low Voc finish is comparable to most polyurethane enamels. | | ADHESION Excellent | |
| 96 HOUR HUMIDITY RESISTANCE Excellent | | IN SERVICE TEMPERATURE LIMITATIONS 300°F | |
| | | Note: As you approach 300°F, depending on the pigmentation, the color may change, but film integrity will be maintained. | |
| CHEMICAL/SOLVENT RESISTANCE | | | |
| 10% SULFURIC ACID | Excellent | 10%HYDROCHLORIC ACID | Excellent |
| 10%AMMONIA | Excellent | 10%SODIUM HYDROXIDE | Excellent |
| XYLENE | Good – Very Good | ISOPROPYL ALCOHOL | Good – Very Good |
| OIL | Excellent | GASOLINE | Good – Very Good |
| 500 HOURS SALT SPRAY | Very Good | | |
| WATER RESISTANCE: Resistant to intermittent exposure. Not recommended for immersion | | | |



| SURFACE PREPARATION | | |
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| 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 | HSP-900/902, HBA-CT, EPX-900, CRE-CT, CRE-904, HSP-2128 | Excellent |
| Hot Rolled Steel | HSP-900/902, HBA-CT, EPX-900, CRE-CT, CRE-904, HSP-2128 | Excellent |
| Galvanized | HSP-900/902, EPX-900, CRE-CT, CRE-904, | Very Good |
| Galvaneal | HSP-900/902, EPX-900, CRE-CT, CRE-904, HSP-2128 | Very Good |
| Aluminum | HSP-900/902, HBA-CT, EPX-900, CRE-CT, CRE-904, HSP-2128 | Fair |
| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| MIXING DIRECTIONS Mix 4 parts by volume of tinted base AUE-280 to 1 part by volume of AUE-281 (clear curing agent) to 1/4 part of UA-11 or UE-28 (Accelerator) by volume. Agitate thoroughly and occasionally during use. 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 Recommended to 2.8 Voc with MAK or Acetone. POT LIFE 77°F (25°C) 1 Hour with UA-11 1 1/2 - 2 Hours with UE-28 | DRYING TIME 3.0 mils wet at 77°F (25°C) and 50% relative humidity. <table><tr><td></td><td><u>UA-11</u></td><td><u>UE-28</u></td></tr><tr><td>To Touch:</td><td>30 - 45 minutes</td><td>45 minutes- 1 hour</td></tr><tr><td>To Handle:</td><td>2 - 2 1/2 hours*</td><td>2 1/2 - 3 1/2 hours</td></tr><tr><td>Dry:</td><td>24 hours**</td><td>24 hours**</td></tr><tr><td>Recoat:</td><td>Up to 7 days</td><td>Up to 7 days</td></tr><tr><td>Force Dry:</td><td colspan="2">(allow 10 minutes air dry)</td></tr><tr><td>Bake:</td><td>15 minutes @ 180 °F</td><td></td></tr><tr><td>Bake:</td><td>20 minutes @ 140 °F</td><td></td></tr><tr><td>Bake:</td><td>30 minutes @ 120 °F</td><td></td></tr></table> <p>* 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.</p> <p>** Paint film is not fully cured for 14 days.</p> <p>Film in excess or below these recommended film builds may cause problems such as, adhesion failure, pigment floatation, solvent popping, slow cure, and accelerated gloss and color failure.</p> | | <u>UA-11</u> | <u>UE-28</u> | To Touch: | 30 - 45 minutes | 45 minutes- 1 hour | To Handle: | 2 - 2 1/2 hours* | 2 1/2 - 3 1/2 hours | Dry: | 24 hours** | 24 hours** | Recoat: | Up to 7 days | Up to 7 days | Force Dry: | (allow 10 minutes air dry) | | Bake: | 15 minutes @ 180 °F | | Bake: | 20 minutes @ 140 °F | | Bake: | 30 minutes @ 120 °F | | |
| | <u>UA-11</u> | <u>UE-28</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Bake: | 30 minutes @ 120 °F | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RECOMMENDED WET FILM BUILD (unreduced) Spray Application: 2.7 -3.5 mils | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RECOMMENDED DRY FILM BUILD 1.7 -2.2 mils Application of film thickness in excess of that recommended for this product will substantially extend dry time and lengthen the recoat window. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| APPLICATION EQUIPMENT Conventional Spray: 60 psi at the gun. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| RECOMMENDED SPREADING RATE 995-1059 sq. ft. at 1.0 mil dry film per U.S. gallon (varies by color). 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. Brush and roller application is not recommended. |
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| 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 | |
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| 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 (304) 843-1300. 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. | |

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