

2K High Solids Polyurethane Topcoat

AU36-FP Series

AU36-FPs (Factory Pack AUE-360 colors) are 2-component high solids urethanes that offer excellent exterior durability, mar and chemical resistance, QUV resistance, and a high film build capability with one pass coverage. AU36-FPs do not require an accelerator, can be sprayed through airless equipment, and can also be brushed or rolled.

These products are recommended for industrial use on pre-treated or primed metal surfaces. Suitable applications include metal fabrication, castings, machinery, agriculture, and construction equipment.

Features and benefits:

- Factory pack color of AUE-360
- Short filled to make a kit using AUE-3501SF
- 2.8 VOC capable, as packaged
- Airless application capable

Associated Products:

- AU36-FP901 – Jet Black 2K High Solids Polyurethane Topcoat
- AU36-FP951 – White 2K High Solids Polyurethane Topcoat
- AUE-3501SF Catalyst
- GXH1086 Catalyst

Physical Constants: *All values are theoretical, depend on color and are Ready-to-Spray. Actual values could vary slightly due to manufacturing variability.*

	AU36-FP901/ AUE-3501 RTS	AU36-FP901/ GXH1086 RTS	AU36-FP951/ AUE-3501 RTS	AU36-FP951/ GXH1086 RTS
Percent solids (by weight)	68.5% +/- 1.0%	66.5% +/- 1.0%	75.3% +/- 1.0%	73.5% +/- 1.0%
Percent solids (by volume)	62.0% +/- 1.0%	59.7% +/- 1.0%	64.3% +/- 1.0%	62.0% +/- 1.0%
Flashpoint AU36-FP9xx	85°F (34°C)	85°F (34°C)	85°F (34°C)	85°F (34°C)
AUE-3501 Catalyst	355°F (179°C)	—	355°F (179°C)	—
GXH1086 Catalyst	—	102°F (39°C)	—	102°F (39°C)
HAPs	Non-HAP Coating*	Non-HAP Coating*	Non-HAP Coating*	Non-HAP Coating*
Photo-chemically reactive	No	No	No	No
RTS Combinations:	AU36-FP901/ AUE-3501	AU36-FP901/ GXH1086	AU36-FP951/ AUE-3501	AU36-FP951/ GXH1086
Volume Ratio:	5 : 1	4 : 1	5 : 1	4 : 1
Applicable Use Category	Single-Stage Coating	Single-Stage Coating	Single-Stage Coating	Single-Stage Coating
VOC Actual	331 g/L 2.76 lbs/gal	348 g/L 2.90 lbs/gal	310 g/L 2.59 lbs/gal	328 g/L 2.74 lbs/gal
VOC Regulatory	331 g/L 2.76 lbs/gal	348 g/L 2.90 lbs/gal	311 g/L 2.60 lbs/gal	329 g/L 2.75 lbs/gal
Density	1046 g/L 8.73 lbs/gal	1038 g/L 8.66 lbs/gal	1269 g/L 10.59 lbs/gal	1251 g/L 10.44 lbs/gal
Volatiles wt. %	31.6	33.5	24.7	26.5
Water wt. %	0.0	0.0	0.2	0.2
Exempt wt. %	0.0	0.0	0.0	0.0
Water vol. %	0.0	0.0	0.2	0.2
Exempt vol. %	0.0	0.0	0.0	0.0

* This coating would be defined as a Non-HAP coating as stated in NESHAPs for Miscellaneous Metal Parts and Products (40CFR 63.3981) and Plastic Parts and Products (40CFR 63.4581).

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Directions for Use

Substrate Preparation:

The surface to be coated must be free of all contamination (including dust, dirt, oil, grease and oxidation). Chemical treatment and the use of a conversion coating will improve the performance properties of the coating system. For optimum performance, AU36-FP9xx should be applied over an approved CPC primer (Refer to CPCTB01 for recommended primers). Variability can occur with substrates, preparation, application method or environment. We recommend that adhesion and system compatibility be checked prior to full application.

Metal

Cold Rolled Steel
Hot Rolled Steel
Galvaneal
Galvanized
Aluminum
Plastic / Fiberglass

Direct to Substrate

Refer to CPCTB01 for approved primers
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Mix Directions:



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Thoroughly agitate component A on mechanical shaker prior to mixing. Stir thoroughly before and occasionally during use.

Thinning:

Q60 (MEK), Q70 (MAK) by up to 10% by volume. Thinning with these products will raise the VOC level above 2.8 lb/gal.



Blend ratios for application are dependent on type of hardener used. Refer to the matrix below for accurate mixing instructions per actual components being utilized.

Blend Ratio (<i>Ready to use kit</i>):	AU36-FP9xx	AUE-3501SF
	5	1



Blend Ratio:	AU36-FP9xx	GXH1086
	4	1



Pot Life @ 77°F (25°): 1 – 2 1/2 hours

Spray Viscosity Range: #3 Zahn 15 – 25 seconds

Unopened Shelf Life:
(each component) AU36-FP = 4 years
AUE-3501, GXH1086: Unopened = 2 years, opened = 14 days

Application Equipment:



Conventional (with or without pressure pot): 1.4 – 1.8 mm @ 45 – 60 psi



HVLP (with or without pressure pot): 1.3 – 1.6 mm @ maximum pressure recommended by manufacturer



Airless: .011 – .017 tip @ 2400 – 3000 psi

Air-Assisted Airless: Not recommended

Brush or Roll: This product can be brushed or rolled

Electrostatic: 1.2 – 1.6 mm @ maximum pressure recommended by manufacturer

Application:



Apply: 1 – 2 medium coats with a 10 – 15 minute flash. Apply only when air, product, and surface temperature are above 50°F (10°C) and the surface temperature is at least 5°F (3°C) above the dew point.

Recommended Wet Film Build: 2.5 – 4.5 mils

Recommended Dry Film Build: 1.5 – 2.5 mils

Square Foot Coverage @ 1mil no loss: AU36-FP901 960 – 1000 sq. ft.
AU36-FP951 990 – 1030 sq. ft.

Dry Times:



Air Dry @ 77°F (25°) 50% RH:

Touch: 1 – 2 hours

Handle: 4 hours

Recoat: 1 hour to 2 days

Force Dry @ 180°F (82°C): Flash 10 minutes @ ambient; 20 minutes @ 180°F (82°C)

Paint film is not fully cured for 7 days. Drying time listed may vary, depending upon film build, color selection, temperature, humidity and degree of air movement.

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Technical Data*

Performance Properties:

Test	ASTM Method	Results
Gloss @ 60° Angle	D523	85+
Pencil Hardness	D3363	H – 2H
Conical Mandrel	D522	Pass
Adhesion	D3359	5B
Chip Resistance	D3710	8 – 9
In Service Temperature Limit†		300° (149°C)

† As you approach 300°F (149°C), depending on the pigmentation, the color may change, but the film integrity will be maintained until 300°F (149°C).

Chemical Resistance:

Chemical	ASTM Method	Result
Toluene	D1308	Slight Ring
10% NaOH (Sodium Hydroxide)	D1308	Pass
10% HCl (Hydrochloric acid)	D1308	Pass
10% H ₂ SO ₄ (Sulphuric acid)	D1308	Pass
Gasoline	D1308	Ring, Discolor
Isopropanol	D1308	Slight Ring
Water	D1308	Pass

Weather Resistance:

	ASTM Method	Result
Salt Spray – 1000 hours¹	B117	
Corrosion Creep	D1654	5A
Scribe Blisters	D714	4F
Face Blisters	D714	8D
Humidity – 96 hours	D2247	
5 Minute Recovery Adhesion	D3359	5B
1 Hour Recovery Adhesion	D3359	5B
24 Hour Recovery Adhesion	D3359	5B
QUV-UVA: 60° angle		
500 hour retention	D523	94%
1000 hour retention	D523	90%
QUV-UVB: 60° angle		
500 hour retention	D523	80%
1000 hour retention	D523	53%

All tests results assume proper cure and preparation of test substrates. Unless otherwise stated, all results were obtained spraying product direct to metal on BONDERITE® 1000.

¹Salt spray results were obtained with AU36-FP9xx over W43181A primer on Bonderite 1000 CRS.

* The application and performance property data above are believed to be reliable based on laboratory findings. It is for the buyer to satisfy itself on the suitability of the product for its particular use. Variation in environment, procedures of use, or extrapolation of data may cause unsatisfactory results.

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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 (412) 434-4515; CANADA (514) 645-1320 and in MEXICO 01-800-00-21-400. Have label information available.



Safety Data Sheets (SDS) for the PPG products mentioned in this publication are available through www.ppgcommercialcoatings.com (Safety, SDS Search) or your PPG Distributor.

For additional information regarding this product, see the SDS and LABEL information.



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