



ALK-300E/ALK-201

Low VOC Acrylic Modified Alkyd Enamel

CPC 61

PRODUCT DESCRIPTION		
Component A ALK-300E Low Voc Acrylic Modified Alkyd Enamel (Pigmented)	Component B Catalyst for ALK-300E	Component C ALK-31 Drier
TYPE Acrylic Modified Alkyd Enamel		
RECOMMENDED USE ALK-300E/ALK-201 is a fast-drying, exterior grade, 3.5 VOC aliphatic/alkyd enamel intended for industrial use on properly prepared and/or primed metal surfaces. Suitable applications include metal fabrication, castings, machinery, and heavy equipment. ALK-300E alkyd enamel provides a wide balance of performance properties including excellent flow, leveling, and film hardness. The addition of ALK-201 Enhancer eliminates re-coat window and improves long-term 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. All colors supplied from the COLOR ACCURATE™ system are formulated to meet Federal standards concerning lead in the dried film. 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.		

PHYSICAL CONSTANTS	
Voc (Mixed) <3.5 lbs/gal (Varies by color)	Flash Points ALK-300E Pensky-Martens 79°F (26C°) ALK-201 Pensky-Martens 113°F (45C°) ALK-31 Pensky-Martens 115°F (46C°)
Percent Solids By Weight 61.1 – 72.2%	Ready To Spray Viscosity (Varies By Color) #3 Zahn = 15 - 25 Seconds #2 Zahn = N/A
Percent Solids By Volume (Varies By Color) 59.9 – 63.6%	
Weight Per U.S. Gallon (Varies By Color) 8.62 –10.3 Lbs./Gallon	

PERFORMANCE FEATURES	
Pencil Hardness (Varies By Color) HB-H	Fade Resistance Exposure studies confirm that the fade resistance of the ALK-300E with ALK-201 Enhancer is equal or superior to competitive 3.5 Voc alkyd enamels.
Flexibility (Conical Mandrel) Pass	Water Resistance Although Resistant To Intermittent Exposure, <i>Not Recommended For Immersion.</i>
96 Hour Humidity Resistance Excellent	In Service Temperature Limitations 150°F Note: As you approach 150°F, depending on the pigmentation, the color may change, but film integrity will be maintained until 150°F.
Adhesion Good	
Sheen ALK-300E is supplied as a gloss finish (80 – 95) on a 60° gloss meter).	

CHEMICAL/SOLVENT RESISTANCE			
10% Sulfuric Acid	Very Good	10% Hydrochloric Acid	Very Good
10% Ammonia	Poor	10% Sodium Hydroxide	Very Good
Xylene	Poor	Isopropyl Alcohol	Fair
Oil	Very Good	Gasoline	Fair
500 Hours Salt Spray	Good		

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 Topcoat	Direct To Properly Treated Substrate
Cold Rolled Steel	EPX-900, HBA-4035, HSP-900/902, PLC-900, VAP-9XX	Very Good
Hot Rolled Steel	EPX-900, HBA-4035, HSP-900/902, PLC-900, VAP-9XX	Very Good
Galvanized	EPX-900, HSP-900/902, PLC-900	Not Recommended
Galvaneal	EPX-900, HSP-900/902, PLC-900	Not Recommended
Aluminum	EPX-900, HBA-4035, HSP-900/902, PLC-900, VAP-9XX	Fair - 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. To each pigmented gallon of ALK-300E Component A (7.5 pints), add the entire contents of 1/2 pint of ALK-201, Component B (clear Enhancer). Mix ratio is 15 parts component A to one part component B by volume. Each 5-gallon container of ALK-300E, component A will require the addition of a one quart container of ALK-201, component B, resulting in a 4-gallon material mix in a 5-gallon container. Agitate thoroughly and allow it to digest 15 minutes before using. NOTE: moisture contamination in components will result in poor properties of applied films or gelling of the material. Do not open until ready to use. To improve dry times, add exactly 4 oz. of ALK-31 drier per full gallon of mixed color. ALK-31 is very dark color and care should be taken when used in light /clean colors as they may darken or appear dirty.

NOTE: ALK-31 must be added to the resin prior to mixing with the color.

THINNING

Thinning is recommended to a 3.5 lbs./gallon VOC with aromatic 100 only.

Formula VOC	Ounces of Aromatic 100 per full gallon of ALK300E	POT LIFE
3.46 - 3.50	None	6 hours after mixing @ 77°F(25°C)
3.41 - 3.45	1.0	
3.36 - 3.40	3.0	
3.30 - 3.35	5.0	
3.20 - 3.29	6.0	
3.09 - 3.19	9.0	
3.00 - 3.08	12.0	

APPLICATION EQUIPMENT

Conventional Spray: 30-40 psi at the gun.

DRYING TIME

(3 mils wet @ 77°F / 25°C and 50% relative humidity) **Note:** Dry times below are when full drier (ALK-31) load is added.

To Touch:	45 minutes	Recommended Wet Film Build (Mixed):	2.8 – 3.7 mils
To Dust:	1 hour	Recommended Dry Film Build:	1.5 – 2.0 mils
To Handle:	2.5 hours*		
To Dry:	24 hours**		
Recoat:	2 hours to 4 days		
Force Dry:	30 minutes @ 120°F (40°C) (Allow 10 minutes air dry)		

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.

* 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.

RECOMMENDED SPREADING RATE

850-946 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

Toluene, Xylene or Lacquer Thinner

APPLICATION PRECAUTIONS AND LIMITATIONS

Apply only when air, product or surface temperature is above 60°F (16°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.**

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