



LIGHT INDUSTRIAL COATINGS

TECHNICAL BULLETIN

ALK-200

TECSTAR™ ACRYLIC MODIFIED ALKYD ENAMEL

PRODUCT DESCRIPTION

PRODUCTS
ALK-200 TECSTAR™
(pigmented)

TYPE
Acrylic Modified Alkyd Enamel

RECOMMENDED USE
TECSTAR™ is a fast-drying interior/exterior enamel intended for industrial use on properly prepared and/or primed metal surfaces. Suitable applications include metal fabrication, castings, cabinets, machinery, and heavy equipment.

TECSTAR™ 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.

PHYSICAL CONSTANTS

WEIGHT PER U.S. GALLON (MIXED)
(varies by color) 7.8 - 10.1 lbs/gal
PERCENT SOLIDS BY WEIGHT (MIXED)
(varies by color) 36.7% - 48.6%
PERCENT SOLIDS BY VOLUME (MIXED)
(varies by color) 32.8% - 39.0%
FLASH POINTS
Pensky-Martens 79°F (26°C)
VOC (MIXED) 4.84 - 5.37 lbs/gal
(varies by color)
READY TO SPRAY VISCOSITY
#3 Zahn N/A
#2 Zahn 20-35 seconds

PERFORMANCE FEATURES

PENCIL HARDNESS HB-H
(varies by color)
FLEXIBILITY (CONICAL MANDREL)
PASS
FADE RESISTANCE
Exposure studies confirm that the fade resistance of the TECSTAR™ finish is significantly better than that of most interior/exterior alkyd enamels.
96 HOUR HUMIDITY RESISTANCE
EXCELLENT

SHEEN
TECSTAR™ is supplied as a gloss finish (80 - 90 on a 60° gloss meter). However, the sheen can be adjusted by the PPG Light Industrial Coatings distributor to an eggshell, satin or semi-gloss finish.

ADHESION
Excellent

IN SERVICE TEMPERATURE LIMITATIONS
200°F
Note: As you approach 200°F, depending on the pigmentation, the color may change, but film integrity will be maintained until 200°F.

CHEMICAL RESISTANCE

500 HOURS SALT SPRAY
Good

SOLVENT RESISTANCE:

10% SULFURIC ACID	GOOD
10% HYDROCHLORIC ACID	VERY GOOD
10% AMMONIA	VERY GOOD
10% SODIUM HYDROXIDE	VERY GOOD
XYLENE	FAIR
ISOPROPYL ALCOHOL	VERY GOOD
OIL	VERY GOOD
GASOLINE	GOOD

WATER RESISTANCE
Resistant to intermittent exposure. **Not recommended for immersion.**

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, HBA-3035, HSP-900/902, VAP-9XX	Very Good
Hot Rolled Steel	EPX-900, HBA-3035, HSP-900/902, VAP-9XX	Very Good
Galvanized	EPX-900, HSP-900/902	Not Recommended
Galvaneal	EPX-900, HSP-900/902	Not Recommended
Aluminum	EPX-900, HBA-3035, HSP-900/902, VAP-9XX	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**MIXING DIRECTIONS**

Stir thoroughly before and occasionally during use.

THINNING

Thinning is not normally required; however, under adverse conditions, small amounts (10% or less) of xylene or aromatic 100 may be added.

POT LIFE

N/A

APPLICATION EQUIPMENT

Conventional Spray: 30-40 psi at the gun.

DRYING TIME

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

To Touch:	15 to 30 minutes
To Handle:	1 hour*
Dry :	10 hours**
Recoat:	Before 6 hours or after 30 hours to 4 days***
Force Dry: (allow 10 minutes air dry)	
Bake 10 minutes @ 180°F	

*** IMPORTANT! If this product is recoated between 6 and 30 hours, lifting of the previous finish will occur. Before 6 hours, the coating is adequately solubilized to prevent lifting, while after 30 hours to 4 days, cure has progressed to a point where solvent resistance is achieved.

* 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 WET FILM BUILD (unreduced)

Spray Application: 2.8 - 3.3 mils

RECOMMENDED DRY FILM BUILD

1.5 - 2.0 mils

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.

RECOMMENDED SPREADING RATE

526-626 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 nor losses due to surface irregularities or porosity.

CLEAN UP

Toluene 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.

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 Light Industrial 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 (304) 843-1300. 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 Light Industrial Distributor.

FOR ADDITIONAL INFORMATION REGARDING THIS PRODUCT, SEE THE MSDS AND LABEL INFORMATION.