# ac products, inc.

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## AC-850-AERO-D-TAN

# PRODUCT DESCRIPTION

AC-850-AERO-D-TAN is an air curing, hand peelable coating designed to be rapidly applied with hot airless spray equipment, that provides protection to metallic surfaces during transportation, fabrication, chemical processing, chemical milling, metal bonding, and storage.

#### PRODUCT PERFORMANCE

AC-850-AERO-D-TAN was designed to be applied to metal parts - especially skin quality aluminum parts - when first received. Parts may then be formed, aged for 10 hours @ 375°F. in air, bonded, routed, drilled, and countersunk. AC-850-AERO-D-TAN resists the solutions used in the bonding processes, including phosphoric anodizing.

Skins protected with AC-850-AERO-D-TAN may be aged in air @ 375°F. for 10 - 12 hours. AC-850-AERO-D-TAN performs equally well in both the 250°F. and 350°F. bonding processes and was designed to withstand outdoor storage when exposed to direct sunlight for 30 days.

Do not immerse AC-850-AERO-D-TAN in solvents or vapor degreasers as they will dissolve the coating.

#### PRODUCT CHARACTERISTICS - AS SHIPPED

APPEARANCE	Tan viscous liquid
SOLIDS CONTENT (% BY WEIGHT)	21.0 ±2%
SOLIDS CONTENT (% BY VOLUME)	24.0 ± 2%
COVERAGE (SQ. FEET/MIL OF DRY FILM/GAL)	385
POUNDS PER GALLON	12.5 ± 0.2
FLASH POINT (Pensky Martens)	None
WARRANTED STORAGE LIFE (AMBIENT TEMPERATUR	RES)2 years in sealed container
SOLVENT SYSTEM	Perchloroethylene
;	and Xylene

## PRODUCT CHARACTERISTICS - CURED FILM (Typical Results)

TENSILE STRENGTH (P.S.I.)	700# Minimum
ELONGATION	
ADHESION (Values in oz./inch width)	
Air Dry	6 - 14 oz.
After 10 hrs. @ 375°F.	16 - 24 oz.
After 250°F. or 350°F. Bonding	8 - 16 oz.

#### PRODUCT PRECAUTIONS

WARNING! CONTAINS PERCHLOROETHYLENE AND XYLENE. HARMFUL OR FATAL IF SWALLOWED. VAPOR HARMFUL IF INHALED. KEEP OUT OF REACH OF CHILDREN. Keep away from heat, sparks, hot glowing surfaces, and open flame. Keep container closed when not in use. Use with adequate ventilation. Avoid breathing vapor. Avoid prolonged or repeated contact with skin. While spraying, wear a suitable mask to prevent inhalation of overspray. DO NOT TAKE INTERNALLY. CONSULT MATERIAL SAFETY DATA SHEET FOR HANDLING AND SAFETY INFORMATION.

## PRODUCT PACKAGING

AC-850-AERO-D-TAN is furnished in 5 gallon pails and 55 gallon F.O.T. nonreturnable steel drums.

## PRODUCT USE INSTRUCTIONS

GENERAL - The directions and recommendations given below are intended to serve as a guide and may need modification to meet local conditions.

MIXING - AC-850-AERO-D-TAN should be thoroughly mixed prior to use and remixed at least once every 4 hours. Avoid introducing air into the coating during mixing. Parts must be clean and dry before coating for optimum performance.

THINNING - Use AC-850-AERO-D-TAN as received. Should the material thicken during use due to evaporation, thin with perchloroethylene.

RECOMMENDED DRY FILM THICKNESS - 6 - 15 mils depending on the process requirements.

CURE CYCLE - Allow the film to air cure for 8 hours minimum at 65°F. or above. At lower temperatures allow additional curing time. An oven cure for 30 minutes @ 150°F. may be used after 1 to 2 hours air dry to speed processing. Baking the dried masked parts for one hour at 200°F. will minimize the seepage of anodizing solutions at the edge of the maskant.

# **HOT AIRLESS SPRAY APPLICATION**

#### Equipment:

- 1. Hot circulating 30:1 airless spray unit.
- 2. Tips Graco 163-823, 163-825, or equivalent, for parts larger than 12" x 12".
- 3. Tip Filter Unit consists of:
  - 1 only, Graco 205-264 tip filter 100 mesh;
  - 1 only, Graco 220-253 tip filter unit

# Pressures and Temperatures:

- 1. Air Pressure 80#.
- 2. Back Pressure 1600 2,100#, or when no pressure gauge is present, 1 cycle per 7 seconds with the air pressure set at 85#.
- 3. Maskant Temperature 130 °F. to 160°F.

# Application:

Hold the spray gun 10 to 14 inches from the part. The speed with which the spray gun is moved determines the quality of the sprayed film. A slow moving spray gun with wide overlaps produces spongy films. The more rapidly the spray gun is moved over the part, the better the quality of the dry film.

- 1. Apply 2 box coats or 3 4 vertical passes. Allow to dry tack free.
- 2. Repeat step 1 until the desired film build is obtained.

The superior "nonsag" characteristics of AC-850-AERO-D-TAN allow the coating to be applied more rapidly than conventional type coatings. A box coat consists of a series of vertical and horizontal passes over the same surface. A 50 - 75% overlap is used, depending on the speed with which the spray gun is moved.