



TECHNICAL BULLETIN AC-850-CH-TOLUENE TAN MASKANT

Description

AC-850-CH-TOLUENE TAN is an air curing, or forced cure hand peelable coating that provides protection to metallic surfaces during chemical milling, chemical processing, transportation, fabrication, and storage.

Product Performance

AC-850-CH-TOLUENE TAN is a version of AC-850-TAN that was specifically formulated to provide lower adhesion than AC-850-TAN. AC-850-CH-TOLUENE TAN may be applied with airless spray equipment or by dip application.

AC-850-CH-TOLUENE TAN should be used when other maskants are difficult to remove, such as on sealed anodized, or very rough surfaces. Should the adhesion of AC-850-CH-TOLUENE TAN be too low, evaluate AC-850-CH-TOLUENE TAN-1.

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

Product Characteristics (as shipped)

Appearance	Tan Viscous Liquid
Solids Content (% by weight)	23.0 ± 2%
Solids Content (% by volume)	17.0 ± 2%
Coverage (ft ² /mil of dry film/gal.)	273
Weight (Lbs./Gal.)	7.7 + 0.2
Flash Point (Pensky Martens)	45°F.
Storage Life (Ambient Temperatures)	2 years in sealed containers
Solvent System	Toluene & VM&P Naptha

Product Characteristics - Cured Film (Typical Results)

Tensile Strength (psi)	1,000 Minimum
Elongation	400% minimum
Adhesion (Typical values in oz./inch width) 2024-T3 clad, air dry 2024-T3 clad, etched aluminum	4 oz. 6-12 oz.

Product Precautions

DANGER! FLAMMABLE. CONTAINS TOLUENE AND VM&P NAPHTHA. VAPOR HARMFUL. HARMFUL OR FATAL IF SWALLOWED. 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.

Packaging –

AC-850-CH-TOLUENE TAN is furnished in 5 gallon pails and 55 gallon lined 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-CH-TOLUENE TAN should be thoroughly mixed prior to use. Avoid introducing air into the coating during mixing. Parts must be clean and dry before coating for optimum performance. Intermittent mixing is necessary in a dip tank to prevent surface skinning of the AC-850-CH-TOLUENE TAN.

Thinning –

Use AC-850-CH-TOLUENE TAN as received. Maintain the viscosity at 12 to 15 seconds in a #5 Zahn cup.

Solvent Replacement Due To Evaporation During Dipping -

Maintain the dip tank at the desired viscosity in a #5 Zahn cup by adding toluene or a toluene/xylene blend .

Recommended Dry Film Thickness –

Six to twelve mils, depending on the process requirements.

Cure Cycle –

Allow the film to air cure for 2 to 4 hours minimum at 75°F. or above. AC-850CH-TOLUENE TAN films may be baked at 130°F. for 30 to 60 minutes after an air cure of 1 hour, should faster processing be required.

Dip Application -

Apply three coats of maskant allowing the film to dry tack free between coats. Reverse the part 180 degrees between the 2nd and 3rd coat.

Airless Spray Application

Equipment –

1. Cold or hot circulating 25:1 or 30:1 airless spray unit.
2. Tips - Graco 163-721 or 163-823 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 - 55 to 60 lbs. cold airless; 80-100 lbs. hot airless.
2. Back Pressure (hot airless) - 1600 lbs. when no fluid pressure gauge is present, 1 cycle/7 seconds with the air pressure set at 90 to 100 lbs.
3. Temperature (hot airless) - 135°F. to 180°F.

Thinning for hot or cold airless spray - Spray AC-850-CH-TOLUENE TAN as received. Mix well prior to use.

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 sprayed film.

Cold Airless Spray

1. Apply 1 box coat. Allow to dry tack free (5 minutes).
2. Apply 2 box coats. Allow to dry tack free (approximately 15 minutes). Resultant film build will be 3 - 4 mils. Each box coat should yield 1.0 to 1.5 dry mils of maskant.
3. Repeat Step 2. Dry film build will now be 6 - 8 mils.
4. Repeat Step 3. Dry film build will now be 8 - 11 mils.
5. Should heavier films be required, apply additional coats.

Hot Airless Spray

1. Apply 1 box coat. Allow to dry tack free (5 minutes).
2. Apply 2 box coats. Allow to dry tack free (approximately 15 minutes). Resultant film build will be 5 mils. Each box coat should yield 1.5 to 2.0 dry mils of maskant.
3. Repeat Step 2. Dry film build will be 8 - 12 mils.
4. Should heavier films be required, apply additional coats.

A box coat consists of a series of vertical and horizontal passes over the same surface. A 50 to 75% overlap is used depending on the speed with which the spray gun is moved.

Warranty

The following warranty is made in lieu of all other warranties, either expressed or implied. This product is manufactured of selected raw materials by skilled technicians. Neither seller nor manufacturer has any knowledge or control concerning the purchaser's use of this product and no warranty is made as to the results of any use. The only obligation of either seller or manufacturer shall be to replace any quantity of this product, which is proved to be defective. Any claim of defective product must be received in writing within one (1) year from date of shipment. Neither seller nor manufacturer assumes any liability for injury, loss, or damage resulting from use of this product.

AC Products, Inc.

172 East La Jolla Street, Placentia, CA 92870

Ph: 714.630.7311 / Fax: 714.666.8309

E-Mail: acpaersp@quakerchem.com Web Site: www.epmar.com

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