

# BONDERITE C-AK 5578-L AERO LIQUID ALKALINE CLEANER

(KNOWN AS TURCO 5578-L)

Issued  
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**INTRODUCTION:**

BONDERITE C-AK 5578-L AERO (known as TURCO 5578-L) is an amber, liquid compound formulated to clean and etch titanium, columbium and tantalum alloys by spray or immersion systems.

BONDERITE C-AK 5578-L AERO readily removes mill soils, marking inks, lube oils, cutting oil and fingerprints at a low concentration and will etch titanium at higher concentrations.

BONDERITE C-AK 5578-L AERO is an effective etch prior to adhesive bonding, diffusion bonding, painting, welding and brazing.

**FEATURES:**

- Boeing Approved
- Supplied in liquid form
- Can be dispensed by automatic equipment
- Readily soluble in tap water at recommended concentrations
- Concentration is controlled by simple titration
- Readily rinses from metal with tap water
- Nonflammable in liquid concentrate or solution form
- Does not require post neutralization rinse

**USE INSTRUCTIONS:**

**Tanks:** Tanks and associated equipment must be fabricated from stainless steel.

**Charging Tanks:** BONDERITE C-AK 5578-L AERO may be used as received or diluted to 15% (v/v) with water. If it is to be diluted, charge the tank with 25% of the required amount of cool clean water. Start mechanical agitation and slowly add BONDERITE C-AK 5578-L AERO to agitated tank. Add balance of cool clean water to operating level.

**Processing Parts:** Maintain tank at 80° to 95°C. Immerse parts completely for 15 to 60 minutes with mechanical agitation. Rinse with warm to hot water, overflowing rinse is preferred.

**CONTROL:****BONDERITE C-AK 5578-L AERO:****Apparatus:**

1. 205945 - Pipet, 25 mL
2. 205700 - Buret, 25 mL
3. 205982 - Erlenmeyer Flask, 250 mL
4. 205402 - Beaker, 250 mL
5. pH meter
6. 205943 - Pipet, 10 MI



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**Reagents:**

1. Standard Sulfuric Acid 1.0 N
2. Alizarin yellow, 1 % in isopropanol

**Procedure:**

1. Obtain a sample from the tank and allow to cool to room temperature.
2. Pipet 25 mL of the sample into a 250 mL volumetric flask and dilute to the mark.
3. Mix well and pipet 20 mL of the diluted sample into a 250 mL beaker. Add 100 mL DI water.
4. Titrate to pH 11.4 with 1.0 N Sulfuric Acid, or to the Alizarin Yellow indicator end point (4 drops - color change pink to yellow).

**Calculation:**

mL of 1.0 N Sulfuric Acid x 6.88 = % by volume BONDERITE C-AK 5578-L AERO

**DISPOSAL INFORMATION:**

Dispose of spent solution per local, state and regional regulations. Refer to your HENKEL SURFACE TECHNOLOGIES MATERIAL SAFETY DATA SHEET for additional disposal information.

**PRECAUTIONARY INFORMATION****DANGER! Contact may cause severe burns to skin and eyes.**

BONDERITE C-AK 5578-L AERO contains sodium hydroxide. Avoid contact with eyes, skin and clothing. Do not take internally. Use with adequate (equivalent to outdoor) ventilation.

Protective clothing, such as a chemical face shield or goggles and gloves, boots and apron made from alkali resistant materials should be worn when using and handling this product. A NIOSH approved respirator should be worn for mist conditions.

Add product to cold water with care to prevent local pockets of steam. Keep containers sealed when not in use. Transport and store in closed containers below 55°C.

Hazardous carbon monoxide gas can form upon contact with food and beverage products in enclosed spaces and can be fatal. Follow appropriate tank entry procedure (see ANSI Z117.1-1977). Before using this product refer to container label and HENKEL MATERIAL SAFETY DATA SHEET for additional precautionary, handling and first aid information.

