

# BONDERITE C-AK LS NP-LT AERO LIQUID ALKALINE CLEANER (KNOWN AS TURCO LIQUID SPRAYEZE NP-LT)

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## INTRODUCTION:

BONDERITE C-AK LS NP-LT AERO (known as TURCO LIQUID SPRAYEZE NP-LT) is a straw colored liquid, developed to remove shop soil, lube oils, light drawing oils and drawing waxes from ferrous, aluminum, copper and titanium alloys.

BONDERITE C-AK LS NP-LT AERO is also suitable for cleaning most magnesium alloys, zinc and cadmium, and is ideal for precleaning metals prior to phosphating and painting.

BONDERITE C-AK LS NP-LT AERO does not contain free caustic, readily rinses from metal surfaces with room temperature water and is effective from 32 to 88°C.

## FEATURES:

- Pratt & Whitney Approved
- General Electric Aircraft Engine Approved
- Operates at a wide temperature range, from 32° to 88°C
- Used at low concentrations
- Free rinsing from parts at room temperature water
- Solution is controlled by simple titration
- Contains less than 1 ppm lead, silver, zinc, tin, copper and cadmium
- Contains less than 50 ppm halogens
- Passes ARP 1755B, Category 10
- Passes ASTM F-945 (AMS 4911 and AMS 4916 Titanium)
- Passes ASTM F-519, Type 1A hydrogen embrittlement test

## USE INSTRUCTIONS:

**Equipment:** Tanks and associated equipment may be fabricated from mild steel or stainless steel. Stainless steel is preferred.

**Spray Systems:** Add **BONDERITE C-AK LS NP-LT AERO** at 3% to 10% by volume of water. Operate system at 32° to 88°C, with a contact time of 1 to 2 minutes, with a spray pressure of 20 to 30 psi. Rinse with cold to warm water. For automatic dispensing systems, set pump to maintain concentration as recommended above.

**Dip Systems:** Add **BONDERITE C-AK LS NP-LT AERO** at 5% to 25% by volume of water. Operate system at 32° to 88°C with a contact time of 5 to 30 minutes, with air or mechanical agitation. Rinse with cold to warm water. For automatic dispensing systems, set pump to maintain concentrations as recommended above.



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**CONTROL:****Apparatus:**

1. 205402 - Beaker, 250 mL
2. 205853 - Graduated cylinder, 100mL
3. 205700 - Buret, 25 mL
4. pH meter
5. Pipet, 100 mL, 20 mL

**Reagents:**

205220 - Titrating Solution 20 (Sulfuric Acid, 0.1N)

**Procedure:**

1. The size of the sample depends on the expected concentration of the solution. The sample has to be cooled before obtaining the proper sample size.
2. For concentration greater than 7%, pipet 20 mL sample, and add 80 mL DI water in a 250 mL beaker. For concentration below 7%, pipet 100 mL sample into a 250 mL beaker.
3. Titrate with TS 20 using a pH meter to pH 8.3.

**Calculation:****For 20 mL samples:**

mLs of TS 20 X 1.085 = % by volume BONDERITE C-AK LS NP-LT AERO

**For 100 mL samples:**

mLs of TS 20 X 0.22 = % by volume BONDERITE C-AK LS NP-LT AERO

**DISPOSAL INFORMATION:**

Dispose of spent solution per local, state and regional regulations. Refer to Henkel Surface Technologies MATERIAL SAFETY DATA SHEET for additional disposal information.



**BONDERITE C-AK LS NP-LT AERO  
LIQUID ALKALINE CLEANER  
(KNOWN AS TURCO LIQUID SPRAYEZE NP-LT)****PRECAUTIONARY INFORMATION:**

**WARNING! On contact causes eye irritation. May cause skin irritation.**

**BONDERITE C-AK LS NP-LT AERO** contains silicate and surfactants. 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, made from alkaline resistant materials should be worn when handling this product. A **NIOSH approved** respirator equipped with a mechanical filter should be worn for mist conditions.

Transport and store in closed containers at temperature below 55°C.

Before using this product refer to container label and Henkel Surface Technologies MATERIAL SAFETY DATA SHEET for additional precautionary, handling and first aid information.

**NOTICE:**

**The above information and recommendations concerning this product are based upon our laboratory tests and field use experience with this or similar products. However, since conditions of actual use are beyond our control, any recommendations or suggestions are made without warranty, express or implied. Manufacturer's and seller's sole obligation shall be to replace that portion of the product shown to be defective. Neither shall be liable for any loss, damage, or injury, direct or consequential, arising out of the use of this product.**

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Henkel Corporation | 32100 Stephenson Highway | Madison Heights, MI 48071  
PHONE: (248) 583-9300 | FAX: (248) 583-2976 | [www.henkeln.com/](http://www.henkeln.com/)

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