ACCU-LABS INC.

4831 S. Whipple Avenue
Chicago IL 60632
Phone: 773.523.3100 Fax: 773.523.4008
www.accu-labs.com
A2LA Accredited ISO/IEC 17025:2005 Certificate # 2558.01

DX-14 ALUMINUM DESMUT

Liquid Deoxidizer - Desmut for Aluminum

Introduction

Accu-Labs DX-14 is a chrome-free liquid Desmut/deoxidizer for all wrought and extruded aluminum alloys. **ACCU-LABS DX-14** is formulated to achieve a clean, white, aluminum surface free of silicon and alloying metals. **ACCU-LABS DX-14** is especially effective for troublesome high-silicon 6000 series alloys, producing maximum quality for your anodized or chromated work. **ACCU-LABS DX-14** works well with 628-CC non-chromate conversion coating for aluminum.

Features and benefits

Liquid product	Easy to mix and measure
Versatile	Works on all wrought and extrusion alloys
Economical	Long solution life
Non-chromated formula	Safer for employees and environment

Operating guidelines for ACCU-LABS DX-14 Desmut

Concentration	5-25% by volume
Immersion time	30 seconds-5 minutes
Temperature	65-105 ^{0} F
Agitation	Recommended

Make-up and maintenance of ACCU-LABS DX-14 Desmut solutions

Properly maintaining your **ACCU-LABS DX-14 Desmut** solution will result in excellent production rates and maximum solution life.

1) Clean and rinse all tanks and equipment before making up working solution. All construction should be of suitable strength polypropylene or polyethylene, reinforced as necessary. (Steel, protected by a drop-in liner, is acceptable; however, tears in the liner will allow escape of solution that could corrode the steel.)
2) Fill tank $^{3}/_{4}$ full with water (tap water is generally suitable). Add the required amount of **ACCU-LABS DX-14 Desmut** based upon your typical usage. Mix thoroughly.
3) Fill tank to working volume. If solution is colder than suggested, live steam or corrosion-resistant immersion heaters may be used to bring temperature into working range. Solution is now ready to use.
4) Use only the amount of **ACCU-LABS DX-14 Desmut** required for your type of work. Excess concentrations may result in a secondary etch of the aluminum. Low concentrations will not produce a clean aluminum surface, leaving a film that will reduce the quality of your work.
5) Small, frequent additions of **ACCU-LABS DX-14 Desmut** will give you more consistent results than larger, less frequent additions. Many factors, such as surface area and drag-out, affect addition rates, and your experience is the best guide to maintenance. The use of an ORP probe and feed pump make solution maintenance simplest.
6) Adjust immersion conditions as production changes. There is no combination of time, temperature, and concentration that is suitable to all work.
7) **Note: Work processed in DX-14 should not dwell any longer than is necessary to achieve desired surface as this depletes the DX-14 and can adversely affect operating cost. Any work falling into the tank bottom should be retrieved immediately.**

Typical Process Cycle:

- Clean to remove soils and oils with **Accu-Labs 368-G or SR-10**
- Water rinse
- Etch (if necessary) with **Accu-Labs 161 or 366G**
- Water rinse
- Desmut/Deoxidize with **Accu-Labs DX-14**
- Water rinse
- Anodize, Bright Dip, Conversion Coat, Resistance Weld, or Zincate prior to plating.

SOLUTION CONTROL:

- Pipette 10 ml sample of DX-14 bath into a 250 ml Erlenmeyer flask
- Add 50 ml DI water
- Add 2 grams Sodium Gluconate and 5 drops Phenolphthalein indicator
- Titrate with 1.0N sodium hydroxide (NaOH) until a pink color prevails and persists for a minimum of 30 seconds. Record ml of 1.0N NaOH used
- CALCULATION- 1.0 x ml 1.0N NaOH= % by volume DX-14

Safety and handling

ACCU-LABS DX-14 Desmut is a hazardous product which contains mineral acids, oxidizers and fluorides. Read and understand the Material Safety Data Sheet before using this product. Wear eye and face protection and chemical-resistant protective clothing while handling and working with this material. Store DX-14 in sealed containers in a cool, dry area away from alkaline. DO NOT FREEZE!

Non-warranty

The information contained in this bulletin is, to the best of our knowledge, true and accurate. All recommendations are made without guarantee. Accu-Labs Inc. disclaims any and all liability arising from the use of this product or the information contained herein.