

# ALUMINUM ETCHANT

P3-ALMECO®/P3-ALMECOLOR®

*for etching aluminum*

## **Aluminum Etchant 33**

Powdered, highly alkaline etch for aluminum and its alloys. Operated at 3-4 oz/gal at 100° to 180°F in immersion application. Produces a very fine, satin-like etch. Retains dissolved aluminum in solution and will not produce scale deposits on equipment.

## **Aluminum Etchant 34**

Liquid, highly alkaline etch for aluminum and its alloys. Operated at 6% by volume at 100° to 180°F in immersion application. Produces a very fine, satin-like etch. Retains dissolved aluminum in solution and will not produce scale deposits on equipment.

# AMCHEM DEOXIDIZER

*for oxide removal on aluminum*

## **Deoxidizer 4-14**

Deoxidizer 4 Make-Up is a powdered chemical which is added to a dilute nitric or sulfuric acid solution to produce a bath for deoxidizing or desmutting aluminum and its alloys. Deoxidizer 14 is a powdered chemical used to replenish the bath.

## **Deoxidizer 6-16**

Deoxidizer 6 Make-Up is a liquid chemical which is added to a dilute nitric or sulfuric acid solution to produce a bath for deoxidizing or desmutting aluminum and its alloys. Deoxidizer 16 is a liquid chemical used to replenish the bath.

## **Deoxidizer 7-17**

Deoxidizer 7 Make-Up is a powdered chemical which is added to a dilute nitric or sulfuric acid solution to produce a bath for deoxidizing or desmutting aluminum and its alloys. This process is unique in that it prevents the deposition of metallic copper on the aluminum. Deoxidizer 17 is a powdered replenisher.

## **Deoxidizer 8-18**

Deoxidizer 8 Make-Up is a liquid chemical which is added to a dilute nitric or sulfuric acid solution to produce a bath for deoxidizing, desmutting or slightly etching of aluminum and its alloys. This process is unique in that it prevents the deposition of metallic copper on the aluminum. Deoxidizer 18 is a liquid chemical used to replenish the bath.

## **Deoxidizer 31-310**

Liquid, two-package, chrome-free deoxidizer for removing cleaning and etching smut from aluminum and its alloys. Initial bath is prepared using sulfuric acid at 4% by volume and Deoxidizer 310 Make-Up at 10% by volume. Bath is operated at ambient temperature in either spray or immersion applications. Deoxidizer 31 Replenisher used to replenish the operating bath.

*cleaners, etch additives, seals, desmutters*

## **P3-almeco 16**

Powdered, silicate-free, low etching cleaner for aluminum and its alloys in immersion applications. Used at 2-4 oz/gal at temperatures between 140° to 180°F. Will not emulsify oils, therefore, requires air agitation during operation.

## **P3-almeco D90**

Liquid, single-package product for removing etching smut from aluminum and its alloys. Used at 5%-10% by volume at ambient temperature. Extremely effective on 1000, 3000, 5000 and 6000 series alloys. Bath control by titration.

## **P3-almeco 17**

Powdered, silicate-free, low etching cleaner for aluminum and its alloys in immersion applications. Used at 2-4 oz/gal at temperatures from 140° to 180°F. Contains surfactants that will emulsify the oils removed during cleaning.

## **P3-almeco seal**

Liquid product to be added to hot water seal tanks to prevent smut formation. Used at 0.1%-0.3% by volume at temperatures in excess of 195°F. Cannot be controlled by titration. Replenishment must be made empirically. Will not provide passing acid dissolution or dye stain results.

## **P3-almeco 43**

Liquid product to be used in combination with caustic soda to provide a long-life etch bath for aluminum and its alloys. Contains sequestering agents that will maintain in excess of 160 g/l of aluminum in solution. Product concentration can be titrated and replenished independent of caustic requirement. Will not eliminate "spangle-effect" caused by zinc in etch bath.

## **P3-almeco seal SLT**

Liquid product to be added to hot water seal tanks to prevent smut formation. Used at 0.1%-0.3% by volume at temperatures in excess of 195°F. Cannot be controlled by titration. Replenishment must be made empirically. Will provide passing acid dissolution and dye stain results if sealing times exceed 25 minutes.

# P3-ALMECOLOR®

*2-step coloring of anodized aluminum*

## **P3-almecolor CA**

Liquid, single-package replenisher for the P3-almecolor electrolytic coloring process. Premixed combination of both tin and stabilizer improves bath control and simplifies replenishment. Can be automated using P3-colortrol II.

## **P3-almecolor S**

Liquid product to be used in combination with P3-almecolor CA to charge a P3-almecolor electrolytic coloring bath. Reduces tin loss to air oxidation and increases throwing power of the P3-almecolor coloring bath.