

ALUMINIUM ETCH LA116

Aluminium Cleaner and Brightener

ALUMINIUM ETCH LA116 is a concentrated aluminium cleaner and brightener. It combines powerful mineral acids surfactants and grease cutting agents to facilitate the removal of light to heavy oxide films and light deposits of oil in a one-step cleaning process.

ALUMINIUM ETCH LA116 is recommended for:

- use in the preparation of aluminium for organic surface coatings and chromate conversion coatings.
- the cleaning and brightening of aluminium equipment and surfaces in the food processing and allied industries.
- the cleaning and brightening of aluminium road tankers and sea and rail containers.

ALUMINIUM ETCH LA116 has been DESIGNED:

- to rapidly cut and remove light build-ups of fats, oils, and greases, derived from plant, animal or mineral origin.
- to quickly penetrate and completely dissolve oxide films from aluminium surfaces.
- to be economical in use.
- to rinse freely without streaking.
- to produce a bright finish on aluminium through a controlled micro-etch process.
- to clean and brighten aluminium in a single stage immersion process.
- to produce a dense foam blanket when used as a immersion cleaner for aluminium extrusions and components, thereby reducing fuming.

CHEMICAL AND PHYSICAL PROPERTIES

Appearance:	Clear, thin liquid
Flash Point:	Non-flammable
Specific gravity:	1.1
pH (1% solution):	1-3
Odour:	Sharp acidic odour
Foam Characteristics:	Medium

METHOD OF USE

ALUMINIUM ETCH LA116 may be used by immersion and manual application.

Immersion Cleaning:

Concentration:	3% to 10% with water
Temperature:	Ambient
Time:	20 seconds to 10 minutes - depending on soil loading.

Manual Application:

1. Wet all surfaces to be cleaned with cold water, do not apply to hot surfaces.
2. Apply **ALUMINIUM ETCH LA116** solution with a mop, swab or acid resistant high-pressure unit to an area no more than 2 m² (50 ft²). Start from the bottom of the surface to be cleaned and work upwards.
3. Allow 1 to 2 minutes contact time being careful not to let the **ALUMINIUM ETCH LA116** solution dry on the surface.
4. Rinse thoroughly with copious quantities of water.

TEST METHOD

1. Pipette 10 ml of ALUMINIUM ETCH LA116 from the bath into an earlemeyer flask.
2. Add about 20 ml of clean water.
3. Add 2 drops of Bromo Cresol Green LN1090 indicator.
4. Titrate with 1 N Sodium Hydroxide till the first trace of blue.

Calculation of bath concentration of **ALUMINIUM ETCH LA116**:

$$\text{Ml of NaOH used} * 1.25 = \% \text{ v/v of } \mathbf{ALUMINIUM ETCH LA116}$$

TANK CONSTRUCTION

Tanks should be of acid proof materials. Small tanks made from plastics such as polyethylene, P.V.C. or fibreglass are suitable.

Large tanks made from 316 stainless steel are suitable even though there is some attack on the surface by **ALUMINIUM ETCH LA116**. Welds must be of good quality as they are most vulnerable to acid attack.

ALUMINIUM ETCH LA116 is corrosive to mild steel and it is unsuitable even when lined with rubber or PVC. Do not allow **ALUMINIUM ETCH LA116** to contact glass, glazed or ceramic surfaces as etching may result.

SAFETY - PERSONNEL

WARNING - HIGHLY CORROSIVE ACIDIC MATERIAL

This substance is highly corrosive to human tissue. Contact with the eyes, even for short periods, may cause blindness. Avoid contact with the skin and eyes and avoid breathing its vapour or mist from spray. Keep out of the mouth.

WEAR PROTECTIVE CLOTHING AND EYESHIELD

IF INJURED, GET URGENT MEDICAL TREATMENT FOR CORROSIVE ACID AND FLUORIDE.