

Aluminum Etch 40 Aluminum Etchant

Product Description

Aluminum Etch 40 is an alkaline material which uniformly etches aluminum alloys. Etch 40 minimizes the formation of aluminum scale in tanks and on heating elements. Etch 40 exhibits a larger holding capacity for aluminum producing a longer bath life and greater economy.

Performance Features

- Minimizes Formation of Scale
- Economical - Highly Concentrated
- Formulated with Larger Holding Capacity for Aluminum for Maximum Bath Life
- Capable of Being Used at Wide Range of Operating Parameters

Physical Specifications

Physical State	Liquid
Appearance	Light Amber
Water Solubility	Complete
pH (1%)	> 13

Equipment Requirements

TANKS: Tanks and associated equipment should be constructed of mild steel.

AGITATION: Recommended.

VENTILATION: Recommended.

Product Make-Up

1. Fill tank 2/3 full with deionized water.
2. Add required amount of Seacole Aluminum Etch 40 to the water while stirring.
3. Dilute to volume with deionized water and heat to operating temperature.

Concentration and Application Methods

Concentration

4 - 8% by volume.

Temperature

70 - 150°F

Time

10 seconds - 10 minutes.

Dependant upon water temperature, concentration, and application. Etch rate increases with increase in temperature. To ensure a uniform etch, ensure proper cleaning of surface prior to etching.

Technical Data Sheet

Bath Analysis

Reagents: 1.0 N Sulfuric Acid
0.5% Phenolphthalein Indicator
Sodium Fluoride powder

Procedure:

1. Pipette 10 ml cooled sample of working solution into 250-ml flask.
2. Add 50-75 mls of distilled water and 5-7 drops of phenolphthalein indicator.
3. Slowly titrate with 1.0N sulfuric acid to a clear or absence of pink endpoint.
4. Record mls of 1.0N acid used as "A".
5. Add 5 grams or approx. 1 tsp of sodium fluoride powder.
6. Rezero buret and slowly titrate with 1.0N sulfuric acid until pink color disappears for 20-30 seconds.
7. Record mls of acid used as "B".

Calculation: Concentration %v/v = (A-1/3B) x 0.63 (multiply by 7.5 to get g/l)
Dissolved Aluminum (oz/gal) = B x 0.25 (multiply by 7.5 to get g/l)

Companion Products

See Seacole's Metal Finishing product line.

Safety and Handling

Read and understand this products MSDS before handling.

Waste Treatment

Individual users should verify the nature of spent solutions to assure compliance with local, state, and federal regulations. Contact Seacole for specific details and/or further waste treatment recommendations.

Ordering Information

Aluminum Etch 40 is available 55 gallon drums and 330 gallon totes.

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