

Metall Etch 295NF

Concentrated Acidic Etch-Cleaner for Aluminium (low foam)

Product Description

Metall Etch 295NF is a clear, colourless, concentrated liquid detergent which has been formulated especially for cleaning and brightening aluminium surfaces.

Uses

Metall Etch 295NF is used as a simultaneous clean/etch solution for aluminium components prior to chromate conversion coating. Use by immersion only in a suitable acid-proof tank. Adequate ventilation must be provided.

User Benefits

- Simultaneous removal of light oil and grease deposits along with etching of aluminium.
- Produces a white, bright finish on aluminium.
- Economical to use because of low concentrations required.
- Excellent rinsability ensures streak-free surfaces.
- Simultaneous cleaning and etching of aluminium prior to painting.

Directions for Use

These recommendations are based on field experience and may require variation for specific applications.

	Immersion
Concentration	2 - 4%
Temperature	Ambient
Time	2 –5 minutes.

Bath Concentration

May be determined as follows:

1. Take a 10.0 ml sample from the bath and add about 50 ml water.
 2. Add a few drops of bromocresol green indicator-solution will be yellow.
 3. Titrate with 1.0N sodium hydroxide until solution turns blue / purple.
 4. Calculate concentration :
- % Metall Etch 295NF by volume = No. of mls 1.0N sodium hydroxide x 0.89

ADDITIONAL TEST PROCEDURES

A working bath may be monitored and maintained more accurately by measuring free acid (FA) and total acid (TA) as follows:

1. Take a 10ml sample of the bath.
 2. Add 100 ml water
 3. Add phenolphthalein indicator.
 4. Titrate with 1.0 N NaOH to a slight permanent pink
- Mls = TA

5. Take a 10ml sample of the bath.
 6. Add 100 ml of water
 7. Add phenolphthalein indicator and 10ml of 20% potassium fluoride solution.
 8. Titrate with 1.0 N NaOH to a slight permanent pink
- Mls = FA

Bath activity is a function of the ratio TA/FA.

A new bath has a TA/FA ratio of 1.0 which increases as dissolved aluminium increases in the solution, and bath activity is suppressed as aluminium increases.

The TA/FA ratio indicates activity (inversely), and may increase to more than 4 in an old bath.

A ratio of >4 indicates low activity.

The ratio can be reduced by increasing product concentration (FA).

However, dumping solution to reduce dissolved aluminium is more cost effective when the TA/FA ratio reaches >3

Aluminium concentration = approx (TA-FA) x 1.5 g/litre

Safety, Transport and Storage

Please refer to the Material Safety Data Sheet.

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