Acid Salt C

Acid Salt C is an effective zincate stripper for use in double zincate finishing processes.

Acid Salt C is a highly stable solution for stripping zincate from aluminum. When double zincate processing, it is used to strip the initial zincate layer.

Acid Salt C is supplied as a dry acid salt which, when dissolved in dilute sulfuric acid, gives a zincate strip that operates at ambient temperature.

Features & Benefits

100% active	Low inventory impact
Stable	Safer to handle and use
Easily waste treated	Total lower cost of use

Operating Conditions

Make-up Procedure

1. Fill the tank half full of water
2. Add the required amount of Acid Salt C and stir thoroughly
3. When fully dissolved, add 1.5% by volume (15 mL) Sulfuric Acid
4. Bring solution to final volume with water

Equipment

Tanks	PVC, rubber lined, Polyethylene, Polypropylene
Heaters	Quartz, titanium, PTFE (to increase temperature to 70°F) (21°C)
Air sparge	PVC
Ventilation	Recommended

Operating Conditions

Acid salt C	6 oz/Gal (45 g/L)
Sulfuric Acid, 66°Be	1.5% by vol. (15mL)

Temperature	70°F – 80°F (21°C – 26°C)
Immersion time	30 sec – 2 min

Titration Method

The working solution should be analyzed periodically for Acid Salt C and Sulfuric Acid and additions made, as necessary.

For best results, the work Acid Salt C solution should also be analyzed for zinc contamination using atomic absorption. It should be dumped and made-up new when the zinc concentration exceeds 2.25 g/L (2250 ppm).

Determination of Acid Salt C

1. Pipette 1 mL of the Acid Salt C solution into a 250 mL Erlenmeyer flask and add 50 mL of water.
2. Pipette 20 mL of 0.1 N Ferrous Ammonium Sulfate into the flask and allow to stand for 30 seconds.
3. Add 5 mL of 25% Sulfuric Acid and titrate with 0.1 N Potassium Permanganate to a violet colored end point. Record this as titration “X”.
4. Repeat this procedure using a 5 mL sample of deionized water. Record this as titration “Y”.

Calculation

Acid Salt C (oz/Gal) = 2.41 x (Y - X)
Acid Salt C (g/L) = 18.06 x (Y - X)

Determination of Sulfuric Acid (H_2SO_4)

1. Pipette 5 mL of the Acid Salt C solution into a 250 mL Erlenmeyer flask.
2. Add 75 mL of deionized water.
3. Add 5 drops of Methyl Orange indicator solution and mix well. The color will turn to orange.
4. Titrate with 1.0 N Sodium Hydroxide solution to a very pale yellow/green colored end point.
5. Record mL used.

Calculation

Sulfuric acid (% by vol.) = mL 1.0 N NaOH x 2.67

The recommended concentration range of sulfuric acid is 2% to 5% by volume.

Solution Concentration Correction

$$\text{Volume of Sulfuric Acid} = \text{Solution Volume} \times \frac{\text{(Original Volume \% - Analyzed Volume \%)}}{10}$$

Example:
To maintain a 5% sulfuric acid concentration in a 30-gallon tank:

Analyzed volume of sulfuric acid is %
Using the concentration correction formula:

$$30\text{-Gals} \times \frac{(5\% - 3\%)}{100} = 0.6 \text{ Gal.}$$

Add 0.6 gallons of Sulfuric Acid, 66° Baume to bring the volume % of Sulfuric Acid to 5%.

Waste Disposal

This material must be disposed of in accordance with all applicable federal, state, and local regulations and permits. Consult the SDS for additional regulatory information. The information contained herein is general in nature and may not apply to each application.

Caution

When working with this product(s), ensure that all health, environmental, and safety regulations and standards are met. Avoid direct contact with this material. Do not inhale associated mist, vapors, and/or dust. Maintain and limit exposure as recommended by OSHA, ACGIH, and other state and local regulations. Wash contaminated clothing before reuse. Always comply with the Hazard Communication Standard, 29 CFR 1910.1200. Emergency showers and eyewashes must be readily available.

It is recommended that the plating chemistry product(s) referred to in this Technical Information Sheet be used: (a) in accordance with the information provided in product specific SDS; and (b) in compliance with all applicable requirements and guidelines established by OSHA, NIOSH, ACGIH, NFPA and others.

WARRANTY: THE QUALITY OF THIS PRODUCT IS GUARANTEED ON SHIPMENT FROM OUR PLANT. IF THE USE RECOMMENDATIONS ARE FOLLOWED, DESIRED RESULTS WILL BE OBTAINED. SINCE THE USE OF OUR PRODUCTS IS BEYOND OUR CONTROL, NO GUARANTEE EXPRESSED OR IMPLIED IS MADE AS TO THE EFFECTS OF SUCH USE, OR THE RESULTS TO BE OBTAINED.

Our people. Your problem solvers.

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