Acid Salt GP

Acid Salt GP is a water-soluble, dry acid which may be used in place of sulfuric or hydrochloric acids as a pickle in a pre-plate line. Acid Salt GP may be used as the acid in operations which process ferrous metals, brasses, copper, copper alloys, zinc die castings, white metals, nickel plated surfaces, lead alloys, stainless steel, pewter, and nickel alloys. Acid Salt GP has been formulated for immersion application, or as a cathodic pickle.

Features & Benefits

Powder	Easy to handle, safer to use; Eliminates issue with fumes, safer to use; Can be stored in non-heated warehouse
Balanced	Eliminate over pickle, less rejects, higher productivity
High fluoride content	Higher activity, shorter cycle times, higher productivity
Wetted	Fast acting, shorter cycle times, uniform action, higher productivity
Versatile	One product for multiple substrates, lower storage footprint

Typical Applications

- Plating Lines with or without cathodic current
- As a pickle in a Black Oxide line
- As an activator for a variety of metal surfaces for pre-plate prior to further chemical processing
- For reworking nickel on chrome plating lines

Operating Conditions

Ferrous metals, Stainless alloys, and Nickel-plated Surfaces

Concentrations	3 – 4 oz/Gal (22.5 – 360 g/L)
Temperatures	Ambient – 160°F (71°C)
Time	15 sec – 3 min
Current density (work)	25 – 90 amps/ft^2

	(2.5 – 9.0 amps/dm^2)
Voltage	2 – 8 volts
Electrode to work area ratio	2:1
Tanks	Rubber lined, Polyethylene, PVC, Polypropylene, Koroseal
Tanks for elevated temperatures (150°F – 160°F)	Koroseal
Heating coils	Karbate, Graphite, Chemical lead, or Teflon
Ventilation	Required when used as a cathodic pickle
Electrodes	Chemical lead or carbon, type agr

Note: When used catholically concentrations should be maintained between 16 to 48 oz/Gal.

The life of the anodes is dependent upon the ampere hours used. Note: when carbon electrodes are used, they should be securely fastened to the bus bar. Because of their weight, lead anodes will maintain a secure contact with the bus bar. As a rule, a lead anode's service life will surpass that of carbon anode.

It is also preferred that when carbon anodes are used that they are bagged to prevent or minimize carbon particles from spreading throughout the Acid Salt GP solution. A carbon anode, in time, will slowly begin to disintegrate. High current densities and solution temperature are contributing factors to the degrading of a carbon anode, also just long service.

For immersion applications where the soils on the ferrous metals consist of light rust, weld scale or heat scale, the Acid Salt GP concentrations may range from 16 to 32 oz/gal. To achieve their removal.

Non-Ferrous Metals Operating Conditions

Copper, copper alloys, zinc die castings, lead alloys, white metals, pewter.

Concentration	2 – 12 oz/Gal (15 – 90 g/L)
Temperatures	Ambient
Time	15 seconds – 2 minutes
Tanks	Rubber lined, Polyethylene, PVC, Polypropylene, Koroseal

Tanks for elevated temperatures (150°F – 160°F)	Koroseal
Heating coils	Karbate, Graphite, Chemical lead, or Teflon
Ventilation	Required when used as a cathodic pickle
Electrodes	Chemical lead or carbon, type agr

Titration Method

1. Pipette 10 mL of sample into a 250 mL Erlenmeyer flask.
2. Add 50 mL of water and 5 to 10 drops Bromocresol Green indicator.
3. Titrate with 1.0 N Sodium Hydroxide solution until solution turns a blue-green color.
4. Record mL used.

Calculation

Factor (oz/Gal) 1.62
Factor (g/L) 12.2
Concentration = mL of 1.0 N NaOH x Factor

Test Kit Method

1. Using syringe, place ½ mL sample into sample bottle. Fill bottle ¼ full of water.
2. Add 5 to 10 drops of Methyl Orange indicator.
3. Add 0.72 N Sodium Hydroxide drop-wise while swirling the mixing bottle, counting the drops, until the color changes from orange to yellow.
4. Record number of drops used.

Calculation

Factor (oz/Gal) 1.14
Factor (g/L) 8.60
Concentration = # Drops of 0.72 N NaOH x Factor

Waste Disposal

Discharge to a disposal system. In order to be completely informed on the latest regulations for your area, please contact the local authorities.

Caution

Acid Salt GP is an acidic product and should be handled accordingly. Avoid skin and eye contact. Wear protective clothing, gloves and goggles when handling the product. Flush exposed areas immediately with clean, cold water. In case of injury, contact a doctor immediately.

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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