Product Bulletin

Product Name: Copperbrite
Product Code:2380006
Revision Date: January 9, 2024

Copperbrite

Copperbrite is a liquid acid product, free of chromates, nitrate/nitrites, and peroxides. Copperbrite was developed to brighten copper and brass alloys in an immersion operation.

Features & Benefits

Non-fuming	Less corrosive/Longer equipment life
Inhibited	Short term tarnish protection
Versatile	Can be used as deoxidizer or burnish compound Can be used on most copper alloys

Typical Applications

- Part on part burnishing in oblique barrel operations
- Descaling of copper alloys
- Activating nickel plate prior to re-plating

Operating Conditions

Concentration	10 to 50% (vol)
Operating temperature	Room to 140°F (max)
Immersion time	20 to 60 seconds
Agitation	Work or solution agitation is beneficial
Equipment	316 stainless, PVC, polypropylene
Heating	316 stainless coils or heaters or Teflon

Copperbrite solution will not generate any heat when it is being operated; consequently, there will be no need for any external cooling. However, for some specific applications, heating of the solution may be necessary.

NOTE: We suggest that the operating temperature be maintained no higher than 120° when the concentration of the Copperbrite is at 40 to 50% (vol).

Suggested Operating Procedures:

- The parts or work should be alkaline cleaned prior to immersion in the Copperbrite solution.
- Heavily scaled or oxidized parts should be processed through a mineral acid pickle prior to immersion in Copperbrite solution. Even though Copperbrite solutions will dissolve light scale, it is recommended because oxide scale on parts will vary in thickness from part to part. Dissolving the scale in a mineral acid prior to immersion in the Copperbrite solution will yield a uniformly bright surface.
- Mild work or solution agitation is beneficial.
- To activate nickel plate, use at 5 %/vol, room temperature for 1 to 2 minutes immersion.

Titration Method

1. Pipette 10 mL of sample and place in a 250 mL Erlenmeyer flask and add 50 mL of distilled water.
2. Add 10 mL 6 N Hydrochloric Acid and 10 mL 15% Potassium Iodide solution and swirl.
3. Place flask in the dark for 15 minutes.
4. Add 10 mL 0.2% stabilized starch solution.
5. Titrate with 0.1 N Sodium Thiosulfate until solution turns clear (no longer blue) and remains clear for 60 seconds.
6. Record mL used.

Calculation

$$Concentration = mL\ 0.1N\ Na_2S_2O_3 \times 0.58$$

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

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

Product Bulletin

Product Name: Copperbrite
Product Code:2380006
Revision Date: January 9, 2024

WARRANTY: HUBBARD-HALL INC. IS NOT RESPONSIBLE FOR THE MISUSE, MISAPPLICATION, OR MISHANDLING OF THIS PRODUCT. SEE THE TERMS AND CONDITIONS OF SALE ON OUR WEBSITE FOR ADDITIONAL TERMS AND CONDITIONS CONCERNING OUR PRODUCTS, INCLUDING BUT NOT LIMITED TO, LIMITATIONS AND DISCLAIMERS OF WARRANTIES AND LIABILITIES.

Our People. Your Problem Solvers.

For more information on this process,
please call us at 203.756.5521 or email: techservice@hubbardhall.com

Hubbard-Hall holds certifications for **ISO 9001:2015**, Responsible Distribution, as accredited by the **ACD** (Alliance for Chemical Distributors) and as a **Women-Owned Small Business**, as well as maintaining an association with **Omni-Chem**[136].