Laser® LL

Laser LL is an acidic liquid concentrate designed to remove lead from brass surfaces that will meet drinking water. This will allow the user to pass NSF standards. Laser LL will also remove oxides of copper and brass. In addition, Laser LL can help eliminate the occasional redness that occurs when processing brass. Continuous filtration of Laser LL will allow the user to remove insoluble lead salts and run a steady state operation.

Features & Benefits

Highly concentrated	Small inventory footprint
Fast acting	Higher productivity
Complete lead removal	Less rejects; higher productivity

Operating Conditions

Laser LL is designed to be used at 10% by volume, but higher or lower concentrations may be used. The unique combination of acids and wetting agents will produce a bright lustrous appearance that is more forgiving than conventional brilliant dips.

The Laser LL should be used at 100°F to110°F, but higher or lower temperatures can be used. Do not exceed 140°F. Lead will be dissolved initially but will become insoluble with time. Simple filtration will remove the lead salts allowing for an extended running of the working bath.

Tanks should be constructed of stainless steel, Polypropylene, Polyethylene, or other acid resistant materials.

Laser LL concentrations can be maintained by simple periodic additions of concentrate, or by a quick titration method which is outlined in the following procedure.

Titration Procedure

1. Pipet 10 mL of cooled bath sample into a 250 mL flask.
2. Add about 75 mL water.
3. Add 5 drops Phenolphthalein indicator.
4. Titrate with 1.0 N Sodium Hydroxide until solution color turns pink.
5. Record mL used.

Calculation

Concentration = mL 1.0 N NaOH x 0.943

Periodic checks of Laser LL should be made to determine and maintain the concentration. If the desire is to run the Laser LL on a continuous basis, the bath may be filtered to remove insoluble lead salts.

Waste Disposal

Cool the working bath to room temperature. With stirring, **slowly** adjust the pH toward neutral with caustic soda, lime, soda ash, etc. Some heat may be generated, so add ingredients slowly and allow to totally dissolve before adding more. When the pH is 4.0 – 5.0, metal will precipitate. Adjust final pH to 8.0 – 9.0. Stop mixing and allow solids to settle. The liquid may be decanted to general waste treatment or filter pressed. Make sure all discharge meets permitted discharge requirements of local environmental regulatory authorities.

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Our People. Your Problem Solvers.

For more information on this process,
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