

# Enerox Cleaner Conc. LQ-7W

Enerox Cleaner Conc LQ-7W is a mildly alkaline concentrate, combined in specific ratios with liquid caustic soda, as a soak cleaner and electro cleaner. Enerox Cleaner Conc LQ-7W is a unique blend of detergents, surfactants, and dispersants. It's formulation in conjunction with liquid caustic soda effectively soak cleans a wide variety of oils and grease from steel and copper parts, and facilitates scale, rust, and smut removal. Enerox Cleaner Conc LQ-7W prepares the base metal for additional processing in a wide range of finishing cycles.

**This product contains phosphate builders, please consult with your EHS staff regarding waste disposal requirements.**

## Features & Benefits

Rapid, efficient cleaning in standard soak & electro cleaning, cleaning cycles	Excellent dispersion and suspension of soils
Controlled displacement of oils for continuous removal	Keeps Polypropylene barrels clean

## Operating Conditions

### Recommended Application Soak Cleaner

	Range	Optimum
Enerox Cleaner Conc. LQ-7W	3% – 7%	5%
50% Liq. Caustic Soda	1.5% – 5%	3%
Ratio LQ-7W: Liq. Caustic	1.4 – 2:1	1.7:1
Temperature	140°F – 190°F (60°C - 88°C)	165°F (74°C)
Time	2 - 5 min	As required
Agitation	Solution movement or mild air	As required

### Recommended Application Electro cleaner

	Range	Optimum
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Enerox Cleaner Conc. LQ-7W	½% – 4%	2%
50% Liquid Caustic Soda	5% – 8%	6.5%
Ratio Liq. Caustic: LQ-7W	2 – 10:1	3.25:1
Current Density (rack)	50 – 120 ASF	As required
Current Density (barrel)	5 – 20 ASF	As required
Temperature	160°F – 190°F (71°C – 88°C)	175°F (79°C)
Time	45 sec – 3 min	As required
Agitation	Solution movement or mild air	As required

**Note:** Don't premix Enerox Cleaner Conc LQ-7W & 50% Liquid Caustic Soda!! The solution will not be stable. Always store and add both products separately.

The ratio of Enerox Cleaner Conc LQ-7W and 50% Liquid Caustic Soda can be modified to provide simultaneous soak and electro cleaning in one process tank.

Note: The high alkalinity of Enerox Cleaner Conc LQ-7W & Liquid Caustic Soda solutions will discolor brass parts. Aluminum and zinc parts will be severely etched. Your Hubbard-Hall sales representative or the corporate technical center will be pleased to recommend a suitable soak cleaner for these sensitive metals and electro cleaner for brass and zinc.

**Equipment**

Tank	Mild steel, reinforced polypro, or fiberglass
Heater	Steel Coil, steel immersion type, steam fed, or gas fired
Ventilation	Mechanical to maintain levels below permissible exposure limits
Agitation	Stirrer, pump, work movement, or mild air

**Solution make up**

**Danger!!** Liquid Caustic Soda is highly corrosive. Consult MSDS sheet before handling this material.

Be sure the process tank has been drained and cleaned. Fill to within two thirds of final operating volume with clean, warm water (100°F – 120°F, 38°C – 49°C). With good solution stirring, gradually add the required amount of Enerox Cleaner Conc LQ-7W. Mix well.

**Test Kit Method**

**Materials Required**

- LaMotte Silica Kit



**Cleaning**  
the Hard to Clean



**Finishing**  
the Hard to Finish



**Treating**  
the Hard to Treat

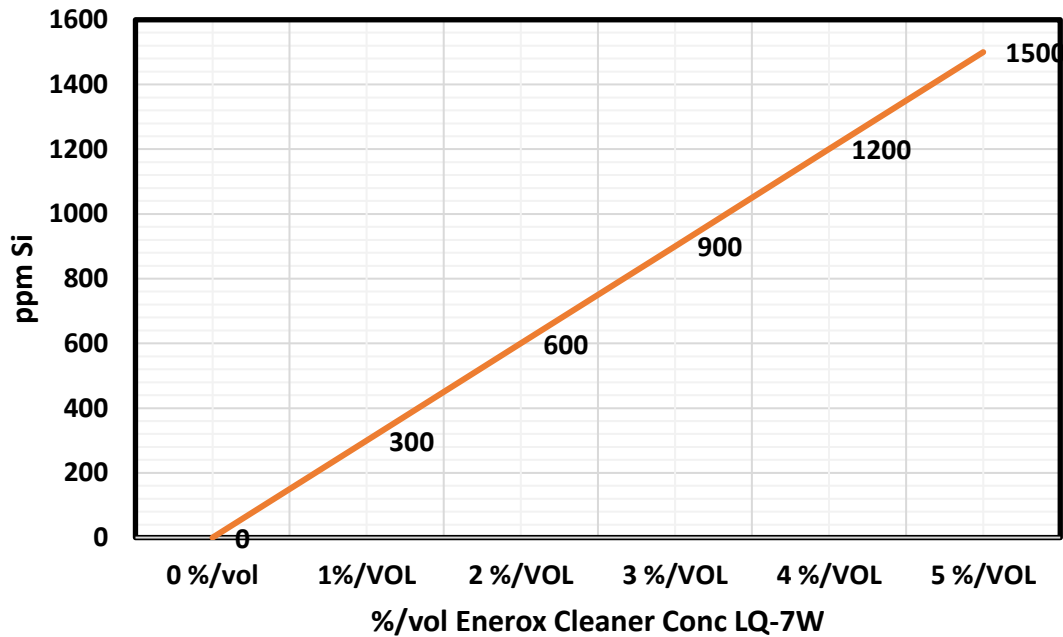
- 1 mL pipette
- 100 mL volumetric flask
- Pipette bulb

Procedure

1. Insert the Silica Octa-Slide 2 Bar (4465-01) into the Octa-Slide 2 Viewer (1101).
2. Pipette 1 mL sample of cleaner solution into a 100 mL volumetric flask.
3. Fill flask to volume with Distilled water. Cap flask and mix well.
4. Fill test tube (0106) to the 5 mL line with the diluted cleaner solution.
5. Add 7 drops of Silica Reagent #1 (4571). Cap and mix by inverting 4 times.
6. Add 6 drops of Silica Reagent #2 (4467). Cap and mix. Wait 5 minutes.
7. Add 6 drops of Silica Reagent #3 (4468). Cap and mix. Wait 2 minutes.
8. Use pipet (0352) to add 2 drops of Reducing Reagent (6405). Cap and mix. A BLUE color will develop in 10 seconds.
9. Insert test tube into the Octa-Slide 2 Viewer. Match color to a color standard. \*
10. Multiply the color standard number by 100 to determine ppm Si.
11. Using the chart, determine the %/volume Enerox Cleaner Conc LQ-7W.

\* If the color is as dark or darker than color standard 10.0, remove enough solution from the test tube to bring the volume down to 2.5 mL Add 2.5 mL Distilled water to return the volume to 5 mL Insert this dilution in the Octi-Slide Viewer. Multiply the color standard number by 200 to determine ppm Si.

**Enerox Cleaner Conc LQ-7W vs. ppm Si**



— Si ppm



**Cleaning**  
the Hard to Clean



**Finishing**  
the Hard to Finish



**Treating**  
the Hard to Treat

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.

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## Our people. Your problem solvers.

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