



Better Chemistry. **Better Business.**

Lusterclean™ 11L

Product Code: 2542004  
Revised Date: 01/26/2009

### Lusterclean™ 11L

#### **DESCRIPTION**

Lusterclean™ 11 L is a liquid concentrate which may be used as an electrolytic cleaner, soak cleaner or cleaner/de-ruster of ferrous metals in either rack or barrel line. This product has the ability to split mineral based oils, thereby extending the life of the solution.

#### **FEATURES AND BENEFITS**

- Liquid form makes it easy to add. No dangerous splatters or dissolution problems
- Oil splitting
- May be used for rust and scale removal from steel
- Low sludging
- Free of cyanides, chromates, chlorinated, or hydrocarbon solvents
- Silicate and phosphate free; ideal where heat-treating follows cleaning operations
- Biodegradable surfactant systems

#### **TYPICAL APPLICATIONS**

- Used in job and captive shops where oil is removed and accumulated
- Heat treat operations
- Good cleaner/ de-ruster for steel



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### OPERATING CONDITIONS

Immersion (rack or barrel) for either cleaner or cleaner/de-ruster

Concentration:	6 to 35% by volume
Temperature:	130° to 200° F
Time:	1 to 6 minutes
Equipment:	mild steel tanks and heating coils
Ventilation:	suggested

Notes: (1) skimming off soils is recommended when **Lusterclean™ 11 L** is being used in a soak operation.  
(2) when **Lusterclean™ 11 L** is being used as cleaner/deruster operating concentration should be in excess of 30% by volume.

- Scale or rust removal for steel and iron by electrolytic cleaning

This may be accomplished by either an immersion method, anodic cleaning or by periodic reverse (p.r) cleaning. Heavier rust and scale will require anodic or the p.r. electro cleaning.

- Anodic electro cleaning parameters

Concentration:	10 to 25% by volume
Temperature:	130° to 200° F
Current density:	20 to 80 amps/ft <sup>2</sup>
Electrodes:	graphite type agx (national carbon) are preferred, alternate - stainless steel type 316
Anode to cathode ratio:	1 to 1

Tank:	steel, rubber lined steel preferred
Heating and Cooling:	stainless steel type 316, bent pipe
Barrels:	lucite, tempron, or polypropylene
Tumbling barrels:	steel, koroseal, rubber or neoprene lined
Racks:	steel or stainless steel, titanium or steel tips plastisol coated.

- Periodic electro-cycle



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Concentration: 10 to 30% by volume  
Temperature: 130° to 200° F  
Current density: 20 to 80 amps/ft<sup>2</sup>  
Polarity: periodic cycle should provide equal time on each polarity. Five to ten second intervals have been found to be a satisfactory cycle.

Note: (1) must end the cycle on the anodic side

Electrodes: graphite type agx (national carbon) are preferred, alternate - stainless steel type 316  
Anode to cathode ratio: 1 to 1  
Tank: steel, rubber lined steel preferred  
Heating and Cooling: stainless steel type 316, bent pipe  
Barrels: lucite, tempron, or polypropylene  
Tumbling barrels: steel, koroseal, rubber or neoprene lined  
Racks: steel or stainless steel, titanium or steel tips plastisol coated.

### CONTROL

#### Titration Procedure

1. Pipette a 10 ml. Sample into a 250 ml Erlenmeyer flask and dilute with 50 mls. of distilled water.
2. Add 4 drops methyl orange indicator and mix.
3. Titrate with 0.5 N hydrochloric acid until the color changes from orange to pink.

**MLS OF 0.5 N Hydrochloric Acid X 0.84 = % BY VOLUME**

#### Test Kit Method

1. Fill bottle 1/3 full of water. Add 1/2 ml (one dropper) of **Lusterclean™ 11 L.**
2. Add 8-10 drops methyl orange indicator
3. Add N-94 solution dropwise--record number of drops required for color change.

**% VOLUME = 1.11 X NUMBER DROPS OF N-94 SOLUTION**



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### **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**

**Lusterclean™ 11 L** is an alkaline product and should be handled accordingly. Avoid skin and eye contact. Wear protective clothing, goggles and gloves. Flush exposed areas immediately with clean cold water. Contact a doctor promptly in case of injury. Consult MSDS for details.

### **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.