Lusterclean™ 40 LF
(Phosphate Free)

Lusterclean™ 40 LF is a mildly alkaline, low foam, water soluble, liquid cleaner developed for cleaning ferrous metals, copper, brass alloys, stainless steels, aluminum, nickel coated stock and nickel alloys in either a soak cleaning, agi-dip soak operations, or spiral washer.

The special blend of detergents in Lusterclean™ 40 LF will emulsify and disperse soils such as lard oil, sulfurized and chlorinated oils, general shop oil and synthetic lubricants.

The other feature of Lusterclean™ 40 LF is its ability, when used hot with agitation, or as an ultrasonic cleaner, to remove buffing compounds from aluminum, brass, bronze, steel, and stainless steel.

ADVANTAGES

- Fast dissolving - dissolves in water at any temperature.
- Safe to use - mildly alkaline - non-flammable.
- Fast acting cleaner - parts are cleaned rapidly.
- Non-corrosive and non-fuming.
- Non-toxic, phosphate free, mildly alkaline (pH 8.5 to 9.5).
- Does not contain nitrites or petroleum solvents.
- Tends to emulsify most fabrication lubricants, oils, and greases.
- Very effective at particulate soil removal.
- Delivers limited rust protection in plant environment until next operation.
- May be used in vibratory finishing mills as a cleaner / burnishing compound.

OPERATING CONDITIONS

When used as a cleaner:

Concentration: 3 to 10% (volume).
Temperatures: 150 to 200F (65 – 93C).
Time: 2 to 10 minutes.
Equipment: Mild steel tank and heating coils.
Ventilation: Not required.
When used as a mass finishing compound:

- **Concentration:** 3 to 5% (volume).
- **Temperature:** Ambient
- **Time:** 5 to 60 minutes depending on application.
- **Equipment:** Vibratory finishing mills, tube and oblique barrels.
- **Ventilation:** Not required

**TITRATION PROCEDURE**

1. Using a 100 ml Graduated Cylinder, pour 200 mls of cleaner into a 500ml Erlenmeyer flask.
2. Add 100-200 mls water.
3. Add 20 drops Bromocresol Purple Indicator.
4. Titrate with 0.5 N Hydrochloric from purple to a yellow end point.

\[
\%\text{ vol Lusterclean 40 LF} = \frac{\text{mls of } 0.5 \text{ N HCL}}{0.39}
\]

**TEST KIT PROCEDURE**

1. Pour a 10-ml sample of Lusterclean™ 40 LF into a mixing bottle.
2. Add approximately 20 mls water.
3. Add 1 ml Bromocresol Purple- swirl flask to insure complete mixture.
4. Add N-94 Test solution drop-wise while mixing until the solution turns from purple to yellow.
5. Record drops of acid used.

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\text{Concentration Lusterclean 40 LF (} \% \text{ VOL)} = \frac{\# \text{ drops}}{0.42}
\]

**CAUTION**

Lusterclean™ 40 LF is a mildly 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.

**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.

**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.