DATE: APRIL 7, 2004

EMERGENCY # - MARTRON 704-289-1934 CHEMTREC 800-424-9300

REF. # MFC-000018

MARTRON LT 100

Martron LT 100 is an alkaline soak cleaner for steel, especially effective in removing oils and other difficult-to-remove soils and oily soils. A blend of dispersant and deflocculants in addition to alkalies and detergents provides Martron LT 100 with its unusual oil removing properties and excellent rinse-ability.

Although **Martron LT 100** is designed primarily for use on ferrous metals, it can be used to clean copper and copper alloys. It is effective for both barrel and rack cleaning steel parts.

Martron LT 100 is supplied as a powder and is available in 400 lb. containers.

SECTION 1: HOW TO USE MARTRON LT 100

OPERATING CONDITIONS

Concentration 8 - 12 oz./gal.

(60 - 90 g/liter)

Temperature 140°F - 200°F

(82°C - 93°C)

Time 2 - 5 minutes

MAKE-UP

Fill a steel tank approximately two-thirds full of warm water (120° - 130°F; 49° - 54°C). Slowly add the **Martron LT 100** needed, while stirring until all the material is dissolved. Fill the tank to final volume and heat to operating temperature.

OPERATION

Soak the work in the **Martron LT 100** solution until all the soil is removed. The higher the temperature, the faster cleaning action. Mild agitation of the work generally speeds up the cleaning action. The fresh cleaning solution should be made up at 8 oz./gal. (60 g/liter) and maintained at 8 to 10 oz./gal. (60 to 75 g/liter); for heavy accumulations of oils and oily soils, the concentration can be increased to 12 oz./gal. (90 g/liter).

EQUIPMENT

Martron LT 100 solutions may be contained in plain steel tanks and heated with steel steam coils. Exhaust ventilation is not required except to remove steam generated by operating at elevated temperatures.

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CONTROL

Pipette a 10 ml sample of the cleaning bath into a 250 ml flask.

Add 5 - 10 drops of modified methyl orange indicator.

Add approximately 50 ml distilled water.

Titrate with 1.0N sulfuric acid to first red endpoint.

Calculation:

Number of drops of 1.0N sulfuric acid x .25 = oz/gal. MARTRON LT 100

SECTION 2: WASTE TREATMENT

Martron LT 100 is an alkaline material and its solution may be neutralized with any of the conventional mineral acids. It is recommended that spent **Martron LT 100** solutions be mixed with effluent from acid solutions to gain advantage of mutual adjustment of pH and minimize any pH adjustment of final effluent.

Martron LT 100 is biodegradable and, therefore, offers no problem in this respect in treatment of waste effluent.

CAUTION: Martron LT 100 powder and solutions are strongly alkaline and may cause severe burns. Contact of the powder or solution with the skin or eyes should be avoided. In case of contact, flush the skin or eyes with cool water for 15 minutes. For eyes, also get immediate medical attention.

When adding Martron LT 100 to a solution, allow the solution to cool below 140°F(60°C). Add the salts slowly with stirring to avoid violent spattering or eruption.

Our recommendations are made in good faith and are based on our skill and experience. However, since the conditions of use of these products are beyond our control, this information is given on the express condition and agreement that *Martron Inc.*, will not be liable to any person by reason thereof. Nothing herein shall be deemed to be a recommendation to use any product in violation of any existing patent rights.