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LIQUID-ICE®

ClearPower LF

LOW FOAMING, HEAVY DUTY ALKALINE
CLEANER / DEGREASER (CONCENTRATE)

PRODUCT DESCRIPTION: Liquid-Ice® ClearPower LF is a Low Foaming, solvent, phenol and phosphate-free cleaner/degreaser for the metal working industry. ClearPower LF removes heavy oil and grease contamination on steel and other ferrous metals, including carbon on engines. ClearPower LF contains a corrosion inhibitor and can be used as a heat activated parts cleaner. It can also be used as a floor cleaner in industrial areas to remove oil and grease. ClearPower LF is **NOT RECOMMENDED FOR USE ON ALUMINUM or BRASS due to its high alkalinity.**

APPLICATIONS:

FLOOR CLEANING: Dilution Ratio 2% - 4%

MACHINERY CLEANING: Dilution Ratio 10%
Using a 10% (1:9) solution depending on the severity of the cleaning job, thoroughly clean the interior of the machine. Allow coolant pumps to run and actuate individual turret or tool stations to allow the cleaner to dislodge any buildups of old coolants in the lines. Make sure the chip conveyor also is in contact with the cleaner to dislodge and accumulated deposits and kill bacteria. **AFTER CLEANING, THOROUGHLY RINSE MACHINE WITH A VERY WEAK (2%) BLEND OF WATER AND LIQUID ICE® COOLANT TO PREVENT CORROSION.** Make sure to completely drain the rinse solution prior to refilling the machine with Liquid-Ice coolant. All traces of cleaner must be removed for best coolant performance.

PARTS WASHER: Dilution Ratio 4 - 8%
Best results at temperature of approximately 140° – 160° F. Time 2 minutes to 5 minutes, depending on the grade of contamination. **ClearPower LF** is recommended for use only on Ferris Metals. Not recommended for use on Brass or Aluminum.

ENVIRONMENTAL DATA: All ingredients are biodegradable according to EPA, DIN, ASTM or standard methods, and are harmless to the environment and contain no hazardous components. Contact your local, state or federal agent for regulations regarding disposal of the product.

For Complete product information including handling and storage, refer to the Material Safety Data Sheet (MSDS), which accompanied this product.

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Proper Cleaning and Preparation of Central Cooling Systems and Individual Machine Tanks for LIQUID ICE COOLANT:

The cleaner your central system or coolant tank is when LIQUID ICE COOLANT is added, the better the coolant will perform and the longer it lasts. The benefits of a clear coolant far out-weigh the minor inconvenience of a thorough cleanout.

If not removed, traces of the old coolant, accumulated shop waste, metal sediment, chips, hydraulic oil, mold growths, and pockets of bacteria will cause the tank life of LIQUID ICE COOLANT as well as its machining qualities to deteriorate. In a new system, construction debris in the trenches and tanks, the chemical waste such as welding flux, and the anti-rust agent applied before shipping must be removed from all surfaces the coolant will touch or flow through.

The cleanout, therefore, is an essential first step. It insures that your coolant has an opportunity to give maximum performance and maximum tank life.

The following procedure should be used whenever possible, while no operators are producing parts.

Procedure:

1. Drain the entire system or individual tank of old coolant.
2. Remove all chips and other debris from sumps, return trenches, oil pans, and filtration units.
3. Fill the system or tank with enough water to circulate through all lines and machines.
4. Add ClearPower Cleaner* at 1:10 (10%) and circulate for an hour. During this period run cleaner through every coolant line and turret station. If possible spray down all surfaces of the machine where the old coolant has touched such as the sides and ceiling. If not possible then use coolant lines to get as much area as possible.
5. Drain the system or tank of all cleaning fluid.
6. Remove tank if possible and clean out by hand or take outside and pressure wash or hose down the tank, all covers, panels, and screens.
7. Put back the tank and once again fill the tank with water and 2% of LIQUID ICE COOLANT mixture sufficient to circulate through all lines and machines. The 2% of LIQUID ICE COOLANT will prevent rusting as opposed to using just plain water.
8. Circulate the 2% of LIQUID ICE COOLANT rinse mixture through the system for 10 to 15 minutes and if possible spray down all surfaces getting rid of all traces of ClearPower Cleaner. Drain the rinse water from the tank or system. If rinse water is exceptionally dirty, rinse a second time. **Fill with** LIQUID ICE COOLANT **immediately after rinsing to prevent rusting.**
9. Consult label or Liquid Ice Corporation for proper percentage of Coolant necessary to accomplish maximum efficiency. Add water and coolant in proper proportions for tank or central system capacity.
10. Circulate through the system to insure proper mixing before production starts. After 10 to 20 minutes check concentration with a Refractometer and insure proper percentage has been reached before commencing part production. If the Refractometer reading is low add more coolant until desired level is reached.

* **Caution!** When working with ClearPower always wear gloves to prevent irritation.