

Paratherm[®] LC[™]

System Cleaner Liquid

Cleans Large Systems — *On The Fly* — Safe, Easy Use

ENGINEERING BULLETIN LC 111

- n Restores System Performance
- n Dissolves Sludge as System Runs
- n Maximum recommended use temperature 550°F (288°C)
- n Minimal Downtime
- n Compatible With Any Mineral-Oil Based Fluid

Benefits

The Paratherm LC[™] System Cleaner Liquid is specifically formulated to dissolve and suspend sludge deposits that can reduce flow — and thus heat transfer — in larger continuously operated systems. Compatible with mineral-oil based fluids, it operates while the system runs, eliminating the downtime involved with flushing fluids or chemical cleaning agents.

Instructions For Use

1. Install a 60 mesh screen in the Y-strainer to catch any large lumps that break loose.
2. Drain the equivalent amount of fluid from the system before adding the LC cleaner.
3. Add LC cleaner slowly using a positive displacement transfer pump and hoses of appropriate temperature range. Either pump LC cleaner liquid directly into system (near pump suction if possible) or pump into expansion tank and drain into system.

How Much Paratherm LC Cleaner To Use In Your System

- a. Replace 3 to 12% of the volume of the system.
- b. The percentage will vary depending upon how long you plan to let the cleaning continue as your system runs. For more precise information, contact your Paratherm representative about a fluid analysis and review.

4. Allow cleaner to circulate until all loops are at operating temperature. Run system normally. Minimum suggested time is 3 weeks, maximum time is 1 year.
5. Clean Y-strainer screen as necessary.
6. To drain cleaner and fluid, shut off heater but allow pump to circulate until system temperature is cool enough to handle (180 to 200°F). Do not turn off pump and allow system to cool as this will permit particles to settle out and contaminate the new fluid.
7. Drain system with pump running. Continue to run pump until it begins to cavitate or the low pressure switch shuts it off.
8. Continue draining as quickly as possible. Any delay will allow sludge to settle out in the piping where it will contaminate the new fluid.
9. Fill system with Paratherm fluid or a compatible brand and restart system.
10. One week after startup, send sample to fluid supplier for testing.

NOTE: The cleaner can be used to clean the expansion tank if the heater is equipped with a warm-up valve. Make sure the tank is purged with nitrogen while the warm-up valve is open.

CAUTION: HOT FLUID CAN CAUSE SERIOUS BURNS. USE ADEQUATE PROTECTIVE CLOTHING AND FACE PROTECTION.



31 Portland Road
West Conshohocken PA 19428 USA
Phone: 610-941-4900
Fax: 610-941-9191
800-222-3611
E-mail: info@paratherm.com
Web: www.paratherm.com

Note: The information and recommendations in this literature are made in good faith and are believed to be correct as of the below date. You, the user or specifier, should independently determine the suitability and fitness of Paratherm heat transfer fluids for use in your specific application. We warrant that the fluids conform to the specifications in Paratherm literature. Because our assistance is furnished without charge, and because we have no control over the fluid's end use or the conditions under which it will be used, we make no other warranties—expressed or implied, including the warranties of merchantability or fitness for a particular use or purpose (recommendations in this bulletin are not intended nor should be construed as approval to infringe on any existing patent). The user's exclusive remedy, and Paratherm's sole liability is limited to refund of the purchase price or replacement of any product proven to be otherwise than as warranted. Paratherm Corporation will not be liable for incidental or consequential damages of any kind.