

# Paratherm™ SC

## Heat Transfer System Cleaner



Concentrated Cleaner for Hot Oil Temperature Control Units | Mineral Oil Compatible

### OVERVIEW

Paratherm™ SC is a proprietary cleaning agent expressly formulated to suspend & dissolve sludge frequently produced in hot oil TCU's where petroleum or glycol-based heat transfer fluids have been used. Paratherm SC is a multi-component synergistic fluid fully compatible with mineral oils and some synthetic fluids.

### OPERATING RANGE



Ambient to 150°F (66°C)

### PERFORMANCE FEATURES

- Suspends and dissolves sludge and carbon lumps
- Unique formulation works well cold or warm
- Re-usable fluid upon filtration/decanting

### TYPICAL INDUSTRIES

- Asphalt Processing & Storage
- Engineered Wood & Building Materials
- Chemical Processing
- Industrial Drying Processes

### RECOMMENDED USE

1. Drain the existing fluid while warm if possible (**NOTE: Cleaning & maintaining your TCU can be simplified by replacing the drain plug with a valve mounted externally.**)
2. Replace drain plug with a ball or globe valve
3. Fill system with Paratherm SC system cleaner so that reservoir tank has approximately 1" to 2" of liquid in the bottom, or enough to start the pump.
4. Allow cleaner to circulate cold for 3-4 hours. If the reservoir needs to be cleaned, run a discharge hose into the tank through the vent, or open the vent valve to agitate fluid in the tank. (**NOTE: Do NOT circulate fluid through the expansion tank while system is hot**)
5. Allow the system to soak overnight.
6. Re-start the system after soaking and circulate for 1-4 hours. Cleaner works more efficiently when warm – Heat to a maximum of 150°F (66°C) if possible.
7. Turn heat off and allow fluid to cool with the circulation pump running
8. Once fluid reaches ambient temperature, begin to drain fluid while pump is still operating. Shut off pump when pressure begins to fluctuate and continue draining completely.
9. Refill the system with a sacrificial charge of the specified heat transfer fluid. Set temperature at 150°F and circulate for 1-2 hours. Shut down and drain immediately.
10. Repeat step 9 if any odor is still present. Once no significant odor is present in the discharge or the system, refill with the specified heat transfer fluid and put the unit back into service.
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## ADDITIONAL PRODUCT HIGHLIGHTS

Paratherm SC is a fully concentrated cleaner designed to restore performance in fouled TCU's. Paratherm SC works very well to dissolve and suspend stubborn sludge deposits coating system surfaces but relies on flow for efficacy. If there is no flow to certain parts of the system, then the cleaner cannot contact the deposits to break them up. In no flow situations, usually mechanical cleaning or pipe replacement is necessary to restore performance. Once the cleaning cycle is completed, the drained cleaner can be re-used after filtration or decanting away from any sediments. Once spent, the fluid can be combined with other common parts-washing liquids and disposed of conventionally.

## CUSTOMER SUPPORT

Paratherm specializes in the supply and support of heat transfer fluid technologies. As such, our business is structured to meet the unique needs of our customers. Multiple distribution sites and 24/7 response ensure product is at your facility when you need it with no minimum order quantity. We provide expert support by phone, email, or on-site visits when necessary.

## EXTENDING FLUID LIFETIME

When Paratherm fluids are used as recommended they can provide many years of reliable service. Systems using Paratherm fluids should be designed and installed by qualified engineers and should be maintained as any other critical production asset. Fluid oxidation is the leading cause of the most serious maintenance issues associated with closed-loop heat transfer systems—including cold spots, heater coking, plugged pressure sensors and ultimately fluid gelling. Paratherm recommends installation of a nitrogen blanket on the expansion tank to prevent oxidation of the fluid. All systems

may benefit from side-stream filtration to promote long-term fluid and system reliability.

## FLUID ANALYSIS SERVICES

Paratherm offers a comprehensive fluid monitoring service to help keep systems running at their best. Our state-of-the-art laboratory is certified to ISO 9001:2015 and well-equipped to run all critical tests. Annual testing is recommended and can identify system issues before they become catastrophic. The fluid in new systems should be tested within 9 to 12 months of start-up. New fluid in existing systems should be tested within the first month of operation to establish a base line for future testing, and annually thereafter.

## REPLACING FLUID

Replacement should be preceded by analysis of the fluid to determine if cleaning or flushing of the system is recommended prior to introducing new heat transfer fluid. Newly commissioned systems typically do not require cleaning before filling. Paratherm recommends installation of a Y-strainer with a minimum 60-mesh screen up-stream of the pump to catch any residues from manufacturing and construction of system components.

## FLUID STORAGE

Drums and totes should be stored indoors to prevent environmental contamination. If sealed drums must be left outdoors, provisions should be made to prevent water from pooling on their tops. While unopened totes are considered weatherproof, Paratherm recommends they not be stacked when stored outdoors. If the fluid is below its minimum pumpable temperature, the containers may be moved indoors to warm up before charging into the system. Refer to the product safety data sheet (SDS) for additional handling and storage recommendations.

The information and recommendations in this literature are made in good faith and are believed to be correct as of the below date. 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 its products conform to Paratherm's manufacturing specifications as of the date of delivery. Because our assistance is furnished without charge, and because we have no control over the fluids 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 warranted. Paratherm will not be liable for incidental or consequential damages of any kind.