

Effective: 5/31/72

bcc: _____ (Dist. Mgr.)

CF/DER/JJR
PWG/File

Dear Mr. _____:

- 1.1 Confirming our telephone conversation on _____ concerning conversion of your Therminol[®] FR heat transfer system, I have enclosed literature on two possible replacement fluids, Monsanto's Therminol 55 and 66. Therminol 66 has the higher maximum operating temperature (650°F vs. 575°F). It is, of course, your decision what product or system you choose as a replacement for Therminol FR.
- 1.2 Per your order No. _____, arrangements have been made for _____ 54-gallon drums of Therminol _____ to be sent to you at \$ _____/gallon, FOB _____.
- 2.2 We want to point out that unlike the Therminol FR products, Therminol 55 and 66 are not classified as fire-resistant heat transfer fluids. Consequently, you should consider the use of protective devices to minimize any added fire risks. We suggest you consult with the insurer of your property relative to this matter.
- 2.3 In order to protect Therminol _____ from oxidation, we suggest the use of an inert gas blanket on your expansion tank system to preclude air contact with hot fluid. If you use a recirculating line to the expansion tank, this should be valved closed during the normal system operation.
- 2.4 A snuffing device should be installed on the combustion chamber of your _____ fired heater. Steam, carbon dioxide or nitrogen may be used to extinguish a furnace fire caused by a heater tube rupture. The snuffing device may be activated by a high temperature switch in your furnace stack.

- 2.5 Please refer to the enclosed Therminol Conversion Bulletin for additional information.
- 2.6 While both Therminol 55 and 66 are miscible with Therminol FR, we recommend against adding either fluid to "top-up" an FR system except as an emergency measure for a brief period of time. Addition of Therminol 55 or 66 can cause the mixture to lose its fire-resistant properties. Also, the useful life of Therminol 55 or 66 may be reduced by reaction with trace quantities of acid in the Therminol FR.

System Clean-Out

- 3.1 When converting your system to Therminol _____, we suggest you thoroughly drain the Therminol FR. Flush the piping, equipment and expansion tank with MCS-681 or a non-chlorinated solvent and again drain into leak-free drums. If MCS-681 is selected as the flush fluid, it may be advantageous to operate the system several days before draining to loosen and remove system soil.

Return of Used Fluids

- 4.1 We ask that you contact one of our Heat Transfer Specialists, (314) 694-2514, when you are ready to return used FR or flush fluid to insure proper disposal of the fluid.
- 4.2 We will pay freight and incineration costs through June, 1972 only on:

Therminol FR fluids.

MCS-681 used as flush fluid.

Combustible organic flush fluid when replacement heating fluid is a Therminol product.

In the event you are not converting to a Monsanto product and are using a non-Monsanto flush fluid, we do offer a high temperature incineration service for proper disposal of FR contaminated materials. We will charge you the freight and 3¢/pound incineration cost on the weight of returned flush fluid less the weight of Therminol FR determined by analysis. Aqueous fluids will not be accepted.

- 4.3 We encourage you to use return drums that meet DOT 17E Specification (55 gallon drums, 18 gauge minimum, 2 bung head; 5 gallon drums 24 gauge minimum) to prevent leakage. The outside of the return drums of Therminol FR and flush fluid should be free of fluid material.
- 4.4 Enclosed are pre-addressed labels marked "disposal only" for drums of used FR and flushing fluid. You will need to clearly indicate the drum contents on each label.
- 5.1 We suggest you plan your conversion as soon as possible. The Therminol FR fluids are no longer available and are not compatible with other heat transfer fluids.
- 5.2 I have also enclosed a recent article from the Wall Street Journal which gives a good summary of the PCB situation.
- 5.3 Monsanto's replacement heat transfer fluid can be ordered by dialing toll-free (800) 325-3850.
- 5.4 Thank you for your cooperation. Please feel free to contact me at (314) 694-2514 if you have any additional questions.
- 6.1 In light of the recent restrictions imposed by the Food and Drug Administration, you may wish to take action on converting your Therminol FR heat transfer systems earlier than you had anticipated. Attached is a copy of the proposed FDA rule making on PCB's in food and food related industries - Department of Health, Education and Welfare proposed legislation taken from the Federal Register, vol. 37, no. 54 dated Saturday March 18, 1972. (Please excuse the poor quality of this copy).

Although your application may not be considered by some as closely akin to "food related", we are aware that some Federal and State agencies are sampling streams, rivers and major bodies of water looking for, among other things, PCB chemistry. If the PCB is found, the agencies tend to determine the source of the pollution.

7.1 Due to a temporary availability problem with Therminol 55, we are recommending our MCS-681 as an alternate flush fluid. MCS-681 Flushing Fluid is priced the same as Therminol 55 except that its FOB point is Eldorado, Arkansas.

MCS-681 can be used for temperatures up to 575°F. during the flushing period. Should a small amount of MCS-681 be left in the system after flushing, we assure you that it will be compatible with the Therminol 55 or 66 used as final fill.

Literature on MCS-681 is enclosed. Please call should you have questions about this material.

Sincerely,

Heat Transfer Specialist

Enclosures