Effective 1-11-72

bcc: _____(Dist. Mgr.)
CP/DER/JJR
P. W. Gann/File

Dear Mr. _____:

1. Q. Does Monsanto have any non-PCB replacements for Therminol® FR?

1.1 Confirming your inquiry 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, F.O.B. _____.

2. Q. What do I need to do to my system so that I can switch?

2.1 When our conversion bulletin becomes available, a copy will be sent to you.

2.2 Based on our telephone conversation it appears that conversion of your system will require:

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 (gas/oil) _____ 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 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.

2.6 When converting your system to Therminol _____, we suggest you thoroughly drain out the Therminol FR; flush the piping, equipment and expansion tank and again drain into leak-free drums and then seal. Be sure the outside of the drums are free of material. We encourage you use drums that meet DOT 17E Specification (55 gallon drums, 18 gauge minimum, 2 bung head; 5 gallon drums, 24 gauge minimum) to prevent leakage.

3. Q. How do I return fluid for disposal/credit?

3.1 Please use the enclosed labels, disposal only, for shipping these drums of used FR and flushing fluid, and ship "collect" to the address shown. Monsanto will pay freight costs incurred and will properly dispose of the material, free of charge, by high temperature incineration.

To insure proper disposition of the fluid, please advise one of our Heat Transfer Specialists, (314) 694-2514, at time of return.

3.2 Any unopened drums of Therminol FR series products will be accepted for credit if returned prior to March 1, 1972:

1. With the original drum seals intact.
2. With Monsanto's product label containing the "caution" statement of "avoid prolonged breathing of vapors or mists, etc." clearly ledgible.
3. With each drum also clearly labeled "returned for credit".
4. Ship, freight collect, to:

Please contact a Monsanto Heat Transfer Specialist, (314) 694-2514, giving him fluid type and number of drums returned for credit prior to shipment.

3.3 We understand you may not be able to return all your unused Therminol _____ before the March 1, 1972 cut-off date. Unfortunately, no reimbursements will be given after this date but we will still pay the return freight and disposal costs.

4. Q. Can I top-up Therminol FR with Therminol 55 or 66?

4.1 While both Therminol 55 and 66 are miscible with Therminol FR, we 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 drastically reduced by reaction with trace quantities of acid in the Therminol FR.

4.2 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. The decision on which replacement fluid to use, however, is yours to make.

5. Thank you for your cooperation. Please feel free to contact me if you have any additional questions.

Sincerely,

Heat Transfer Specialist

Enclosures: (Normally one or more of the following)
Applications Unlimited
Therminol 55 and 66 Bulletins
Therminol FR Conversion Bulletin
Return Labels (Specify number)

MONS 093475