bcc C. Paton/J. J. Roder
1650 P. L. Slayton
1650 J. S. Pullman

October 26, 1971

Mr. L. F. Reed
Cellu-Craft Co.
1401 Fourth Avenue
New Hyde Park, N.Y. 11040

Dear Mr. Reed:

The Therminol FR-1 used as a heat transfer fluid in the Gravure press dryer and adhesive laminator contains polychlorinated biphenyls (PCBs) of various types.

The PCB concentration in our environment has come under severe scrutiny of various governmental agencies and scientific laboratories. In some studies, certain PCBs have been found to be a persistent environmental contaminant and possibly, injurious to certain forms of bird, aquatic and animal life. Accordingly it is very important that PCBs be kept out of the food chain.

Some specific applications where the use of Therminol FR fluids should definitely be avoided are in heat transfer systems involving food or food related products, animal feeds, pharmaceutical products, packaging materials involving any of the above items, and buildings where any of these items are manufactured or stored.

According to our conversation on October 5, 1971, the Gravure press dryer using Therminol FR-1 is involved in the printing of plastic food wrapping and containers. In this regard, we stress that your application should not continue on Therminol FR series heat transfer fluids.

Further, we will not sell any Therminol FR fluid as makeup to your heating systems. We do encourage an immediate change to a non-PCB containing fluid. In this regard I can recommend Therminol 55 or Therminol 66 for your application.

Physical data on the Therminol 55 and Therminol 66 fluids are attached. If your heat transfer fluid requirements are for temperatures in excess of 550°F, I would recommend an immediate conversion to Therminol 66 which has thermal stability to 650°F.

MONS 094146

If your heating requirements are for temperatures below 590°F, Therminol 55 will be a satisfactory alternate.

We would not see any need for the alteration of installed equipment to use either Therminol 55 or Therminol 66. Neither Therminol 55 nor Therminol 66 are fire resistant heat transfer fluids as is the FR series fluids. In this regard we recommend you contact your insuring agency to determine the need for protective devices to minimize fire risk.

Should you agree to change to one of our non-PCB containing Therminol fluids within the next sixty days we can provide Therminol 55 at 70¢/gallon FOB Alvin, Texas and Therminol 66 at 22¢/lb. FOB Anniston, Alabama. The density of Therminol 55 at 75°F is 7.4 lb./gallon and the density of Therminol 66 at 75°F is 8.35 lb./gallon. Terms are net thirty days. The prices quoted are for the 500 to 800 gallon quantities required for both the Gravure press dryer and adhesive laminator.

Also, within this sixty day time period we will accept the Therminol FR fluid in your system for disposal at our cost. Specifically, we will pay the freight on all FR fluid drained from the system and returned to us and waive the 3¢/lb. incineration fee. I have included drum labels to be used for return of fluid to our Sauget, Illinois plant.

My copy of this letter I am asking Jay Pullman to contact you and answer any questions you may have regarding the PCB issue and conversion from the Therminol FR fluid in your system. If you have any questions in the interim, please contact Jay in New York or me in St. Louis. Jay's address in New York is:

Monsanto Company
277 Park Avenue
New York, N.Y. 10017
(212) 922-4111

Very truly yours,

D. E. Roush
Product Specialist
Heat Transfer Fluids

ce

Enclosures