Monsanto

FROM (NAME & LOCATION): JOHN MASON - B2SA

DATE: August 10, 1971 CC:

SUBJECT: THERMINOL FR-SERIES FLUIDS

REFERENCE:

TO: Mr. J. R. Eck

The recent East Coast Terminol incident involving fish meal contamination has demonstrated the need for even further restricting our sales of Therminol FR Series products for closed system heat transfer units.

The major problem in controlling this business is the large number of users. (860 units are currently in operation utilizing some 800,000 gallons of Therminol FR Series fluids.) In many cases the units are small and we are not convinced that the operators have either the desire or the capability to operate a leak-free system.

We have looked carefully into the question of discontinuing all sales of Therminol FR Series fluids but find this to be unattractive to Monsanto. It is not sufficient merely to discontinue sales. We have the responsibility of changing customers' systems to an alternative fluid, either Monsanto or a competitor, and collecting and incinerating the old fluid. The total cost in the form of lost profits, free replacement fluid, return freight and incineration costs for the old Therminol FR fluid would amount to approximately $2M in 1971.

In view of this high cost we propose a modified plan aimed at restricting sales of Therminol FR Series fluids to customers who have a critical need for a high degree of fire resistance and where the operation is sophisticated enough to provide maximum control over leakages and escape to the environment.

The following actions are designed to achieve the maximum possible degree of control over the sales and usage of Therminol FR Series fluids:

ACTIONS ALREADY TAKEN TO AVOID ANY RECURRENCE OF THERMINOL FR SERIES FLUIDS CONTAMINATING THE FOOD CHAIN

1) ~~1970/71~~ 1969/70/71 customer lists have been scrutinized for Therminol FR Series users where there appears to be the

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slightest possibility that leakage of the system could result in fluid entering the food chain.

a) All customers identified as possible sources of contamination (this includes such users as paper coaters where there is a possibility that recycled material may have been used in food packaging applications) have been contacted and advised to change over to Therminol 55 or 66. At this time free replacement material ~~has been~~ is being dispatched to all these customers and we anticipate change over will be completed within the next few ~~days~~, weeks with the old Therminol FR Series material returned to W. G. Krummrich for incineration.

3) A revised list of approved users ~~has now been~~ IS BEING prepared and plugged into the Division's Customer Order Processing System. Orders from customers not appearing on this approved list will not be accepted.

At this time we are ~~not 100%~~ sure that this approved list is not complete and therefore on an interim basis no orders are being accepted without written approval from the Director of Sales Specialty Products Group.

The following plan will be implemented effective 1 Sept 1971 :

1) No new customers for Therminol FR Series products will be accepted. A letter has been sent to equipment manufacturers advising them not to recommend Therminol FR Series products and stating categorically that we will not accept any future orders from them for these products. (See Exhibit A attached.)

2) Orders from existing customers for replacement fill or "top up" will be querried and the customer contacted either by telephone or by a visit to persuade him to change over to Therminol 55 or 66 as an alternate product. To encourage him to take this action he will be offered the new material at 30 % discount and we will agree to incinerate the old material at no cost.

In cases where the customer is able to convince us that he has a serious fire hazard and it is absolutely vital to continue to use Therminol FR Series products,

he will be given the following proposal:

a) the price of Therminol FR Series products will be increased from .280¢/lb. to .435¢/lb. (This is to cover the cost of significantly reduced volume production.)

b) he will be asked to sign a letter which makes it clear that he completely understands the hazards of using these products and of the need for ensuring leak proof operation and prevention of escape to the environment. The letter will also hold Monsanto harmless in case of any incidents involving lawsuits. (See Exhibit B attached.)

3) A new label is being designed for dielectric Aroclors and Therminol FR Series products giving additional warnings that this material must not be allowed to contaminate food, feed, or any other product likely to come into contact with human beings or animals.

4) A further letter is being sent to manufacturers of transformers and capacitors using dielectric Aroclors warning of the hazards of using these materials, particularly in the light of recent incidents with chickens and milk. (See Exhibit C attached.)

JOHN MASON

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