

Monsanto Company
St. Louis, Missouri

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PLASTICIZER COMMERCIAL DEVELOPMENT CALL REPORT NO. 69-82

MOCAN *file*
WOODBIDGE, ONTARIO

Date of Call: October 31, 1969

For MOCAN: Bruce Murray
Leon Yeshin
Gary Stewart

For Monsanto: C. P. Farley

Purpose of Call: To determine MOCAN's interest in
Phosgard 2XC-20 and their willingness
to run plant-scale trials.

Summary of Results:

Yeshin and Murray both thought Phosgard 2XC-20 priced in the 60¢ a pound range would have a market for flame retarding flexible urethane foams. Phosgard 2XC-20 has acceptable permanence, good heat stability, and viscosity low enough to allow direct injection of the fire retardant into the mixing nozzle.

MOCAN is quite satisfied with the results obtained in the laboratory evaluation. However, to determine if the compound would have commercial significance, they would have to run it in full-scale equipment. They were quite insistent that further laboratory testing would be quite meaningless and that the only way to determine if Phosgard 2XC-20 would work in the very touchy foaming process would be to try it under actual conditions.

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The minimum amount of Phosgard 2XC-20 required for a plant trial would be one 50-gallon drum. However, if this 50-gallon trial were successful, they would like to continue their evaluation and thought that three drums would be needed. However, part of these three drums they would use to further explore an end use for Phosgard 2XC-20, which they did not disclose, which is unrelated to fire retardancy. MOCAN is filing patents for this different application and said they thought the market schedule for Phosgard 2XC-20 in this end use could be as high as two million pounds per year.

Bruce Murray said that they did not have budget money for running the test and requested that we pick up the machine charges and the cost for raw materials. Their machine charge is \$300 per hour and the raw material is \$60 per minute. In order to run the initial test, Murray estimates about 6 minutes running time over a 2-hour period. This would figure to be \$600 for machine time and \$360 for raw materials. This is the maximum charge, and the actual charge may be considerably less. If saleable product is made during the trial, we would receive credit for the usable portion.

Leon Yeshin says that he has developed some system using Phosgard 2XC-20 at a level of 5 parts along with 1 part of a synergist to achieve remarkably good fire retardancy in flexible urethane foams. He was unwilling to discuss his synergist with me, but said he would discuss it with people from our laboratory. I told Leon he was welcome to visit with our research people any time he could make it to St. Louis.

C. P. Farley

ph

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