

Not Indexed

File: 3675

Marshall Laboratory
December 23, 1955

F. H. BEADLES
WILMINGTON F & F

REQUEST FOR ALLOCATION OF \$8600 IN CLASS A FUNDS
TO HASKELL LABORATORY FOR STUDY OF TOXICITY
OF PHENYL MERCURY OLEATE IN PAINTS

We request approval to allocate \$8600 of Marshall Laboratory Class A funds to the Haskell Laboratory for use in A-1 research. We have discussed with Haskell Laboratory a tentative program to better define our position with respect to the use of Phenyl Mercury Oleate in four representative types of paint formulations.

On notification of approval of this request, Haskell Laboratory will write an A-1 Research Project and submit it to the Marshall Lab to assure agreement on the technical program.

A discussion of the tentative program follows. Further information on this program may be found in Memorandum to File: Toxicity Problem Phenyl Mercury Oleate (P.M.O.) in Paints, K.C. Lampert, 7/27/55.

OBJECTIVE:

We wish to determine the toxic effects, if any, of P.M.O. as it is currently used in several types of paint formulations. Skin absorption, dermatitis effects and oral toxicity will be investigated. However, an investigation of the hazard of mercury fumes in the air from burning off paints will require a separate project.

DETAILS OF PROPOSAL:

The tentative program as arranged with Haskell Laboratory includes the following four types of paint:

- 1.) 87-894, Trim and Shutter White (Alkyd) 0.2% P.M.O.
- 2.) 301-920, House Paint Light Cream (Linseed Oil) 0.075% P.M.O.
- 3.) 387-301, Masonry Paint (Polyvinyl Acetate) 0.02% P.M.O.
- 4.) 389-016m House Paint (Alkyd, Modified Polyvinyl Acetate)
0.2% P.M.O.

Haskell Laboratory has selected the animal most suitable for each type of test as follows:

1.) Skin Absorption Tests:

Each of the above four paints will be applied repeatedly to the skin of rabbits and the skin absorption determined by measuring the mercury content of certain organs. Cost at \$1000 per paint---\$4000.

2.) Skin Patch Tests:

The four test paints and four matching control paints containing no P.M.O. will be applied to the skin of human volunteers to determine the skin irritating effects of P.M.O. in the paint medium. Cost at \$1000 per paint and control--\$4000.

3.) Oral Toxicity Tests:

The approximate lethal oral dose of P.M.O. for rats will be determined using a 0.2% P.M.O. solution in linseed oil. Straight linseed oil is more digestible than a complete paint or paint vehicle and thus the maximum toxic effect of P.M.O. solution film forming medium will be obtained for this test. Cost---\$600

Total estimated cost of project-----\$8600.

ADVANTAGES AND LIMITATIONS OF THE PROGRAM

As well as satisfying our moral obligation to our customers, we will be placing ourselves in a better legal position in the event of a court case involving the alleged toxicity of our paints.

This program should enable us to make a sound decision as to the degree of hazard associated with marketing these particular paints or any closely related formulas.

However, it should be noted that, if we should want later to increase the P.M.O. content of any of these paints, or, if we need to reduce the P.M.O. content of any of these formulas found to be unsafe, we shall have to make an additional toxicity study costing about \$2000.00 per formula. The same would be true if we were to want to use P.M.O. in a significantly different vehicle.

SALES DEVELOPMENT

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WJMcC:BC
12/15/55