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Foseco®

PROPOSAL #15 - CODE S.M.P.D. 2/1/04/0 - First Revision

RESEARCH PROJECT - PROFAX DEVELOPMENT

INTRODUCTION:

PROFAX is presently faced with severe competition from numerous similar products. Some of these competitives are equal to or better than PROFAX in certain regards, notably absence of boiling and ability to withstand hot mold temperatures without deterioration. The original issue of this program covered work intended primarily to enable us to meet this competition and correct deficiencies in the existing PROFAX® 10. This objective has now very largely been met, and it therefore seems appropriate to revise the project shifting the emphasis more towards longer term future development, and away from short term work intended to meet existing competitive situations. (One existing situation remains unsolved, namely a product to meet competition from Gilliam Packaging Company's compressible, spongy type of insulator).

The general object of the work planned for the future is to develop an insulator which will possess as many as possible of the following properties:

1. High burn-out temperature.
2. Asbestos-free.
3. Low density.
4. Low raw material cost.
5. Thermal conductivity, if possible half that of PROFAX 10 or lower.
6. Easy to make.
7. Compressible.
8. Non-boiling.
9. Adequately refractory (free from penetration).

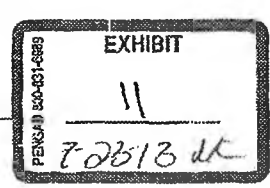
It is intended that the product ultimately developed will be superior to anything presently on the market by considerable margin and will permit our hot top designs to be reduced to the lowest possible head volumes, considerably below those which can presently be achieved by competitive products.

OBJECTIVES:

The following specific lines of work are proposed:

1. To develop a compressible, spongy PROFAX-like material specifically to meet competition from Gilliam Packaging Company. This development is of high immediacy.

2. To develop a PROFAX whose properties are generally on the lines described above, and whose insulating properties, in particular, are markedly superior to those of PROFAX 10.



PROPOSED:

1. Examine the properties of products which; although essentially similar to PROFAX 10, contain high fiber contents. It is expected that this work, already well in hand, will lead to a product capable of meeting the Gilliam Packaging Company competition.

2. Survey the properties of insulators based primarily on high contents of diatomaceous earth and fiber. If refractoriness proves to be a problem consideration will be given to the use of high melting point fibers as opposed to slag wool.

3. Examine the influence on the insulating properties of the high fiber products of fillers such as alumina, chromite, olivine, and others opaque to infrared radiation.

ESTIMATED COST:

1.	Labor - (two man weeks) materials and overhead	$ 700
2.	Labor - (twelve man weeks) materials and overhead	6,000
3.	Labor - (three man weeks) materials and overhead	2,100

PRIORITY:

All of the above items are priority #1 for the Feeding Aid Group (MY - RRD).

TARGET DATE:

Item #1 - May 1, 1967

Item #2 - August 1, 1967

Item #3 - September 1, 1967

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