Johnson & Johnson
BABY PRODUCTS COMPANY

RARITAN, N.J. 08869

January 20, 1977

SUBJECT: JOHNSON'S Baby Powder - Improved
JOHNSON'S Baby Powder Treated With
Polyethylene Glycol 400
Project #2640.02

Mr. M.Q. Tatlow:

The following outlines the background, objectives, and status of the Polyethylene Glycol 400 (Carbowax - Union Carbide) treated Baby Powder.

Mr. Vernon Zeitz of Windsor Minerals experimented with additives to talc to reduce its dusting potential. From these limited experiments, Mr. Zeitz suggested to Baby Products R&D that the addition of Polyethylene Glycol 400 be evaluated for its ability to decrease the powder cloud produced during powder application.

Studies, thus far, have produced the following information.

1. The Baby Powder Formula No. 3553-112-02 containing 0.5% PEG 400 can be compounded by mixing the PEG 400 and perfume together and spraying this mixture on to the talc in a V blender.

2. "The PEG 400 treated Baby Powder produced about 5X less respirable airborne particles in the 1st minute, which is the time of highest concentration" when dispensed from a 9 oz. JBP container placed in a mechanical shaking device within a dust chamber. (This effect is greatly increased when the talc used is from the "fines removed" program).

3. Organoleptic evaluation of aged powder indicates a stabilization of the perfume.

4. Penetration or wicking of water is greatly enhanced by the addition of the PEG 400. A drop of water will not penetrate a column of JBP in 5 minutes, while it takes less than 10 seconds with the treated powder.

5. Rate of delivery from a sprinkler JBP container is reduced but should not represent a consumer problem in removing its contents.

6. Top line results of a blind paired comparision product test of JBP ind tes no major negatives compared to the current product and a preferen for the fragrance perceived as being stronger. A preclinical require ment of a tissue culture study was satisfactorily completed prior to product testing.

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7. No significant moisture pick up was demonstrated in high humidity chambers.

The expected benefits from treating JBP with Polyethylene Glycol 400 are reduced respirable dust clouds when dispensed, less mess and waste, and improved perfume stability.

Addition product tests of aged powder are planned.

Alan M. Marks

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cc: Mr. N.M. Berlin
Dr. J.R. Marshall
File #2640.02

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