CC: NJKM

Johnson & Johnson
BABY PRODUCTS COMPANY

RARITAN, N.J. 08869

May 26, 1977

SUBJECT: Demicronized Talc 2006.01
Airborne Respirable Particles (ARP) Measurements

TO: Mr. G. Lee

A previous memo dated February 16, 1977 entitled, "Demicronized Talc, Carbowax 400-Aging Study", reported on the effectiveness and permanency of the PEG talc treatment in reducing ARP in JBP. The measurements were made in a dust chamber under conditions which would enhance the collection and concentration of the ARP for purposes of comparative measurements.

The results of the dust chamber experiment showed a definite decrease in ARP as a result of the PEG treatment, and a further decrease in ARP when fines removed (demicronized) talc is used in place of regular V-66.

DUST CHAMBER RESULTS

	Reg. JBP	Reg. JBP +0.25% PEG	JBP Made with Demicronized Talc +0.25% PEG
Peak Concentrations of ARP - Mg/M^3	9.3	2.5	0.5

The question was then raised as to whether these differences in ARP exist, to a measurable degree, at the much smaller concentration levels we found during the actual baby and adult powdering studies. In other words, to determine that the use of demicronized talc is justified by measurable decreases in ARP at low concentrations.

To determine this, a controlled experiment was conducted using the average parameters of powdering time, weight of powder, total diapering time, and general procedure determined in the baby powdering study. Each of the

729-10

Demicronized Talc 2006.01
Airborne Respirable Particles (ARP) Measurements
- -

three experimental powders was used 10 times in powdering and diapering a life size doll.

Data is attached as separate data sheet, listing peak and average ARP concentrations to which the "Baby" would be exposed.

Results

The results indicate that measurable decreases in ARP are obtainable with PEG treated powders when measured in the range of ARP concentrations obtained in actual baby powdering studies. Lower ARP concentrations were found for PEG treated JBP made with demicronized talc vs. regular talc.

Comments

It appears worthwhile to proceed with the use of demicronized talc since a measurable decrease in ARP is obtainable in the low concentration range of actual use experienced in the Baby and Adult powdering studies.

Future

Plans are underway by Product Research to make several hundred pounds of PEG treated demicronized talc JBP for market testing. When this product is available, we will test it also in the manner described in this report.

It is necessary to determine fully that the use of demicronized talc is justified by measurable decreases in ARP under actual use conditions.

R S Russell
R. S. Russell

/by
cc: W. H. Ashton
G. Lee
N. Berlin
R. Gordon
B. Semple
W. Waggoner
W. Sherman
R. Miller - Windsor Minerals, Inc.

attachment