UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

004096

NOV 20 1984

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

DATE:

SUBJECT: Petitioner's Dermal Penetration Estimates For Aliette

TO: Henry Jacoby, PM #21
and
Becky Cool
Registration Division (TS-767)

FROM: Carolyn Gregorio, Toxicologist
Toxicology Branch/ HED (TS-769)
11-20-84

THRU: Robert P. Zendzian, Ph.D.
Acting Section Head/ Section III
and
William L. Burnam, Branch Chief
Toxicology Branch/ HED (TS-769)
11/20/84

Chemical: Aliette, Fosetyl-al (Aluminum tris (o-ethyl phosphonate)

Caswell No.: 12B

Petitioner: Rhone-Poulenc

Accession No.: 254772

Petition No.: N/A

EPA Identifying No.: 359-706

Action Requested: The Petitioner has submitted an estimate of dermal penetration through human skin. Richard B. Stoughton, M.D. (Professor of Dermatology, School of Medicine, University of California, San Diego) reviewed the technical information on Aliette. Dr. Stoughton "would guess that Aliette would penetrate human skin at a rate of less than 1% in a 6-16 hour period of contact, if Aliette were applied at about 4 ug per cm2."

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Background: Aliette is an oncogen in rats (IRDC, Report No. 347-016, dated March 27, 1981). The following lesions were observed:

a.) Transitional cell carcinoma (no metastasis) and transitional cell papilloma of the urinary bladder at 40,000/30,000 ppm males.

b.) Pheocromocytoma at 8000 and 40,000/30,000 ppm males.

NOEL = 2000 ppm (lowest dose tested)
LEL = 8000 ppm

Recommendation: The Petitioner's dermal penetration estimate of 1% coincides with the Branch's estimate. If this dermal penetration estimate provides an acceptable oncogenic risk estimate, no futher dermal penetration data will be required.