



DuPont Haskell Laboratory

DuPont Haskell Laboratory
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Via Federal Express

TECHNICAL FILE

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Attention: F.Y.I. Coordinator
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
401 M Street SW
Washington, D.C. 20460-0001

Dear F.Y.I. Coordinator:

Lead Acetate (trihydrate)
(CAS # 6080-56-4)

This letter is to inform you of the results of some immunologic research, which we recently became aware of, with the above referenced material.

In this study, 2 groups of pregnant Sprague-Dawley rats (CrI:CD BR) rats were administered lead acetate in their drinking water at concentrations of 0 or 250 ppm. At parturition, lead acetate treatment was ceased and animals were switched to normal drinking water. The offspring were culled at 10 days of age to 4 males and 4 females per litter. Offspring were weaned at 21 days of age. At 5-weeks of age, two assays, the Delayed-type Hypersensitivity Response (DTH) and anti-KLH IgG antibody ELISA were performed.

The results indicate that the immunotoxic effects of lead can be measured in very young animals after *in utero* exposure to lead. In addition, a gender difference was noted in that females displayed a depressed DTH response whereas males did not.

Previous published studies have indicated that when pregnant Fischer rats were exposed to 250 ppm lead acetate in the drinking water and their offspring maintained on normal drinking water for 13 weeks, lead acetate produced a statistically significant decrease in the DTH response of offspring. It is well documented in the literature that lead is known to have an immuno-modulatory effect in adults and in animals exposed during gestation. This research shows that it can be detected in 5-week old rats.

These findings will be published in a forthcoming manuscript.

Sincerely,

A. Michael Kaplan, Ph.D.
Director - Regulatory Affairs

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TSCA F.Y.I Submission:

Lead Acetate (trihydrate)
CAS # 6080-56-4

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