

File c  
2 H. Feeding Study  
MR-787

LD<sub>50</sub> ORAL TOXICITY TEST

REPORT NO. 105-66 - 4599

DATE April 4, 1966

MATERIAL Lead Acetate · 3H<sub>2</sub>O ("Baker Analyzed" Reagent)

PHYSICAL APPEARANCE white crystals

MR-10 BK.NO. 2 PAGE 124 H.NO. 4154 T.I. Joyce Longcore

DEPT.        DEPT.NO.        ALD 11,000 mg/kg D<sub>20</sub>°        pH       

Material given by stomach tube to ♂ Ch R - CD rats in original form or

as a 40 %<sup>1</sup> (✓) solution of ( ) active ingredient in water.  
( ) suspension (✓) original sample

| Date      | No. Rats Dosed | Av. Wt. | Dose mg/kg | % Sol. | Av. Dose (ml) | Av. Surv. Time (days) | Mort. Ratio | Remarks | TS   |
|-----------|----------------|---------|------------|--------|---------------|-----------------------|-------------|---------|------|
| 1-7 1966  | 10             | 251     | 11,000     | 40     | 6.91          |                       | 9/10        |         | NONE |
| 1-27 1966 | 10             | 259     | 9840       | 40     | 6.36          |                       | 4/10        |         | NONE |
| 1-27 1966 | 10             | 256     | 8670       | 40     | 5.55          |                       | 3/10        |         | NONE |
| 1-24 1966 | 10             | 261     | 7500       | 40     | 4.89          |                       | 2/10        |         | NONE |
|           |                |         |            |        |               |                       |             |         |      |
|           |                |         |            |        |               |                       |             |         |      |
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|           |                |         |            |        |               |                       |             |         |      |

LD<sub>50</sub> = 9200 mg/kg

Confidence Limits<sup>2</sup> = 8364 <sup>10,120 and</sup> mg/kg

LD<sub>50</sub> based on Pb<sup>++</sup> = 5023 mg/kg with confidence limits for 19/20 probability of 5526 mg/kg and 4567 mg/kg.

1. gms/100 ml
2. "A Simplified Method of Evaluating Dose-Effect Experiments", by J. T. Litchfield and F. Wilcoxon, J. Pharm. Exp. Therap., 96: 99 (1949)

**Clinical Signs:** Animals were pale and lay flat on their stomachs on day of dosing. Quiet, anorexia, constant weight losses, few small poorly-formed feces, bodies cool to touch, abdomens swollen after several days of weight loss. Death occurs in 1-8 days after dosing. Animals that survived showed same signs as above for 2-5 days.

**Pathology:** Two rats which died from an 11,000 mg/kg dose were necropsied immediately after death and were found to have greatly distended stomachs filled with fluid and necrotic-appearing tissue at pyloric end of stomach.

**Summary:** The calculated oral LD<sub>50</sub> for lead acetate [Pb(CH<sub>3</sub>COO)<sub>2</sub> · 3H<sub>2</sub>O] for the male rat is 9200 mg/kg with 19/20 Confidence limits of 10,120 mg/kg and 8364 mg/kg. Based on the lead ion (Pb<sup>++</sup>) the calculated LD<sub>50</sub> is 5023 mg/kg with 19/20 Confidence limits of 5526 mg/kg and 4567 mg/kg.

Clinical signs of toxicity include immediate pallor, and belly-to-cage posture on day of dosing; anorexia, weight losses, few small poorly-formed feces, lower body temperatures and swollen abdomens.