109801 7-9-74 (5)

DATA REVIEW NUMBER: (ES) VII E-1

TEST PROTOCOL: Avian 8-day Dietary LC_{50} (Waterfowl).

CHEMICAL TESTED: Chipco 26019 (Technical)

TEST SPECIES: Mallard

RESULT: LC_{50} > 20,000 ppm

VALIDATION CATEGORY: Core

CATEGORY REPAIRABILITY: N.A.

REGISTRANT: Rhodia, Inc. Agricultural Division

DATE DATA SUBMITTED: 9 July 74

ABSTRACT:

(1) Only one treatment level (20,000 ppm) tested; 25 birds were used; no mortality recorded.
(2) Food consumption of test birds averaged only 20% of amount consumed by control group; body weight losses were high (25%) in treated birds.
(3) Test birds returned to a level of feed intake comparable to the control group on the day after toxicant was removed from feed.

VALIDATION CATEGORY RATIONALE:

The registrant should have tested more than one treatment level for this feeding trial. The Environmental Safety Section would not normally expect the registrant to test dietary toxicant concentrations greater than 5,000 ppm. The toxicant level tested during this study was 20,000 ppm. However, the complication inherent in this particular study is that the toxicant acted as a food repellent and food consumption among test birds was markedly depressed. Therefore, in this case, it would have been desirable to examine the toxicity effect at lower toxicant concentrations in the diet because greater food consumption would have been expected (which may have resulted in a different toxicity response).

L. A Windberg 5
reviewer 167

SW

Nevertheless, in this study, the test birds which were exposed to the toxicant at a concentration of 20,000 ppm did consume feed at a rate of 5% of their mean body weight per day. Thus, the average daily toxicant intake was 1,036 mg per kg of body weight. Based on the data on measured toxicant intake in the feed, the test birds were actually exposed to the full dietary concentration of 20,000 ppm even at the reduced food consumption recorded in this study.

The 8-day dietary study for bobwhite quail ((ES) VII d-1) also documented decreased food consumption by test birds which was directly associated with higher toxicant concentrations in the feed. In that study, the mortality rate of test birds increased progressively with higher toxicant concentrations. The bobwhite dietary study, therefore, provides some assurance that the toxicity response expected with greater food consumption at lower toxicant concentrations would not be expected to intensify among mallards. Hence, the Environmental Safety Section has classified this mallard dietary test as a "core" study.