CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE  
MEDICAL TOXICOLOGY BRANCH  

SUMMARY OF TOXICOLOGY DATA  
ZINC PHOSPHIDE  

SB 950-111, Tolerance # 284  

DECEMBER 9, 1987  

I. DATA GAP STATUS  

<table>
<thead>
<tr>
<th>Study Type</th>
<th>Data Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic rat:</td>
<td>Data not required at this time</td>
</tr>
<tr>
<td>Chronic dog:</td>
<td>Data not required at this time</td>
</tr>
<tr>
<td>Onco rat:</td>
<td>Data not required at this time</td>
</tr>
<tr>
<td>Onco mouse:</td>
<td>Data not required at this time</td>
</tr>
<tr>
<td>Repro rat:</td>
<td>Data not required at this time</td>
</tr>
<tr>
<td>Terato rat:</td>
<td>Data not required at this time</td>
</tr>
<tr>
<td>Terato rabbit:</td>
<td>Data not required at this time</td>
</tr>
<tr>
<td>Gene mutation:</td>
<td>Data not required at this time</td>
</tr>
</tbody>
</table>

Grouped compounds: Aluminum phosphide (SB005, tolerance # 225, lead compound), magnesium phosphide (SB151, tolerance # 375) and zinc phosphide (SB111, tolerance # 284).

Document 375-005, Record # 43724, is the "Guidance for the Reregistration of Pesticide Products Containing Magnesium Phosphide, An Amendment to the Registration Standard Issued February 1982", dated February, 1986. Requirements for all chronic, reproductive, teratogenicity and mutagenicity tests were waived for magnesium phosphide products. The same waiver holds for aluminum phosphide as in the standard in Document 225-005, Record 43729. The EPA document on zinc phosphide, 284-004, Record 018651, dated June 23, 1982, on page 4 indicates the studies will be waived if the unidentified residues are characterized as "toxicologically insignificant..."

II. TOXICOLOGY SUMMARY

CHRONIC, RAT

2.
Not required at this time.

CHRONIC, DOG
Not required at this time.

ONCOGENICITY, RAT
Not required at this time.

ONCOGENICITY, MOUSE
Not required at this time.

REPRODUCTION, RAT
Not required at this time.

TERATOLOGY, RAT
Not required at this time.

TERATOLOGY, RABBIT

3.
Not required at this time.

TERATOLOGY MOUSE

005, 007 028426, 035406 "Studies on the Teratogenicity of Zinc Phosphide." (Bowling G State University, 8/4/82) Zinc phosphide, no purity stated; given by oral gavage on days to 17 of gestation to groups of mice at 0, 0.004, 0.04, 0.4 or 4.0 mg/kg/day; 20 - 22 pregnant per group; NOEL > 4.0 mg/kg; no maternal toxicity and no developmental toxicity reported; unacceptable (no analysis of dosing solutions, no MTD; no clinical or necropsy observations, study conducted over a 5 month period, no justification for using mice, inadequate measurement of body weights.) JAP, 10/30/85 and JCC, 7/24/86.
MUTAGENICITY, GENE
Not required at this time.

MUTAGENICITY, CHROMOSOME
Not required at this time.

MUTAGENICITY, DNA/OTHER

5.