

STUDY TITLE:

Salmonel/afMammalian-Microsome Plate Incorporation
Mutagenicity Assay (Ames Test)

PROJECT LEADER:

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EXECUTIVE SUMMARY

The test article, Zinc phosphide (technical), was tested in the *Salmonella* Mutagenicity Assay using tester strains TA98, TA100, TA1535, TA1537 and TA1538 in the presence and absence of Aroclor-induced rat liver S9. The assay was performed in two phases using the plate incorporation method. The first phase, the dose range-finding study, was used to establish the dose range for the mutagenicity assay. The second phase, the mutagenicity assay, was used to evaluate the mutagenicity of the test article.

In the dose range-finding study, the maximum dose tested was 5000 μg per plate. This dose, limited by the protocol, was delivered to the test system as a suspension in dimethylsulfoxide (DMSO). The results of the dose range-finding study indicate that precipitate and toxicity were observed. Therefore, the maximum dose that was plated in the mutagenicity assay was 5000 μg per plate.

In the mutagenicity assay, no positive responses were observed with any of the tester strains in the presence and absence of Aroclor-induced rat liver S9. In addition, precipitate but no appreciable toxicity was observed. The overall evaluation and dose ranges tested are as follows:

S Activation	Overall Evaluation and Dose-Response (Jg/plc)				
	TA98	TA100	TA15	TA157	TA1538
	1-1	1-1	1-1	1-1	1-1 KIP
None	-	-	-	-	-
	333 I 5000	333 I 5000	333 I 5000	333 I 5000	333 I 5000
Rat	-	-	-	-	-
	333 I 5000	333 I 5000	333 I 5000	333 I 5000	333 I 5000

•=-negative, +=positive (maximum fold increase)

In conclusion, the results indicate that under the conditions of this study, test article Zinc phosphide (technical) (MA# TD102) did not cause a positive response in the *Salmonella/Mammalian-Microsome* Plate Incorporation Mutagenicity Assay.

July 1993