

LOG OF MEETING

11/10/94
Fire Retardants
Commission

SUBJECT: Tin Compounds as Fire Retardants

DATE OF MEETING: October 26, 1994

PLACE: CPSC, Bethesda, MD.

NON-COMMISSION REPRESENTATIVES:

Arthus J. Killmeyer, Tin Information Center of North America
Dr. Paul A. Cusack, ITRA Fire Test Laboratory, England

COMMISSION REPRESENTATIVES:

Alan Brauning, OGC
D. Tinsworth, EPHA
B. Lee, HS
L. Burton, HS
M. Toro, CERM
E. Krawiec, ESEE
T. Karels, EC
L. Edwards, ESEE
E. Perry, ESME
J. Hoebel, ESME
N. Wakeman, Product Safety Letter

SUMMARY:

Mr. Killmeyer summarized the organization of the units involved in tin research. The International Tin Research Institute was formed in 1932 to conduct research on expanding tin utilization. It was funded by countries that produce tin, usually via a tax on the companies. Recently, this system changed, and the Institute now receives direct funding from the companies. Also recently, ITRA Ltd. was formed to function as a way for individual companies to sponsor special research projects and to help promote use of tin. They are affiliated with two Tin Information Centers, one in Ohio and one in Belgium. They also have a fire test laboratory.

Dr. Cusack presented their research of zinc hydrostannate and zinc stannate as flame retardants. Data were given demonstrating performance superior to a common retardant, antimony trioxide, when used in certain halogenated polyester resins. Low toxicity, low smoke production, high decomposition temperature, good processing, and pigment compatibility was claimed. LOI and Cone calorimeter data were presented. The only disadvantage cited was cost. To date, little testing has been done with the retardants used with polyurethane foams. Supporting documents were provided.

