Chemical Name: 6-acetoxy - 2,4-dimethyl m-dioxane

Code Name: Reg. No. 824-7

Trade Name: Dioxin

Chemical Structure:

Empirical Formula: C₈ H₁₄ O₄

Molecular Weight: 174.2

s/g: 1055-1.070

Appearance: Clear amber liquid

Boiling Point: 66-68°C @ 3 mm Hg

Freezing Point: Does not freeze at - 25°C

Solubility: Soluble in or miscible with water and organic solvents

Odor - Characteristic

Use: Anti microbial agent

Company: Sindar Corporation

Petition for tolerance or exemption: None

Application for Registration: Already registered as reproted in USDA

letter dated August 12, 1966

Deadline: None

Copy of PR 9-230 and labelling: Not included

Toxicological Data Summary

 $LD_{50} = 1.9 \text{ ml/kg}$ Acute Rat Oral

Acute Eye Irritation (Rabbit) 1% Aqueous solution produced no irritation or death.

Repeated Insult Patch Test (Human) 1% Aqueous solution produced no

irritation or sensitization.

Summary

A review of the small amount of toxicological data submitted to us, post registration, reveals Dioxin to be in the slightly toxic class on the basis of the acute rat oral and it appears to have no dermal or eye irritant properties.

Further studies appreciated by this office would include:

- 1. Acute Rabbit Dermal to include no effect level $\label{eq:local_possible} \text{and LD_{50} if possible}$
- 2. Acute Rat Inhalation to include LC_{50} and no effect level.