

HEALTH AND SAFETY LABORATORY
EASTMAN KODAK COMPANY
KODAK PARK

ACC. NO. 907040
LAB. NO. 74-170

TOXICITY AND HEALTH HAZARD SUMMARY
(Does not include physical hazards - flammability, etc.)

CHEMICAL: Bis(2-ethylhexyl)Terphthalate

SYNONYMS: Dioctyl Terephthalate; DOTP

PHYSICAL FORM:
MP or BP in °C:

FORMULA: $C_{24}H_{38}O_4$

TOXICITY:

This compound is at the most only slightly toxic to laboratory animals. Oral and intraperitoneal injections as high as 3200 mg/kg caused no sign of irritation or distress in either rats or mice. The undiluted liquid, when held in occluded contact with guinea pig skin for 24 hours, caused slight skin irritation. There was no evidence of systemic toxic effect due to absorption through the intact skin. The skin absorption LD_{50} is >20.0 cc/kg. Using a standard eye irritation test, this compound caused slight eye irritation in the rabbit. Using a footpad skin sensitization procedure this compound produced a skin sensitization reaction in 8/10 guinea pigs tested. The reaction was weak in six and strong in two of the guinea pigs. The undiluted material was dropped on the clipped uncovered backs of five guinea pigs at a dose of 0.5 ml/pig/day for 10 days (2 work weeks). The subacute test indicated that the compound may cause moderate irritation with repeated skin contact and, as stated before, repeated skin contact may result in skin sensitization. The compound was mixed into a standard laboratory diet at concentrations of 0.1% and 1.0% (w/w). Each diet was fed for 10 days to a group of rats weighing approximately 220 g. All animals ate and gained weight normally. After being sacrificed, a hematological profile, sera examination, and pathological examination of the major organs showed no abnormalities. In summary, rats ate as much as 890 mg/kg/day for 10 days without evidence of major systemic toxicity.

HAZARDS:

This compound may cause skin sensitization.

PRECAUTIONARY HANDLING:

Avoid repeated or prolonged contact with the skin.

REFERENCE:

Unpublished data, Health and Safety Laboratory, Eastman Kodak Company, Rochester, New York.

HEALTH HAZARD: (Kodak Park Safety Std. 7.09)

R - 1
S - 2

SUMMARIZED BY: Richard L. Sharp, Ph.D.

DATE: January 15, 1975

FOR USE ONLY WITHIN EASTMAN KODAK COMPANY

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TOXICITY REPORT - EASTMAN KODAK COMPANY - HEALTH AND SAFETY LABORATORY

HSL No. 74-170

Chemical: Bis(2-Ethylhexyl) Terephthalate

Source: E. Wilson Wilson Formula:

T.E.C.

Solution	Animals* No. and Species	Type of Test	Initial Score		Final Score	
			24 hrs	48 hrs	24 hrs	48 hrs
<u>Skin Sensitization</u>						
<u>1% in A+D+G.P. Fat.</u>	<u>5 G.P.</u>	<u>Inj. Drops</u>	<u>1.0</u>	<u>1.0</u>		
<u>1% in Whole Rabbit Blood</u>	<u>10 G.P.</u>	<u>Footpad inj.</u>	<u>—</u>	<u>—</u>		
<u>1% in A+D+G.P. Fat</u>		<u>Drops on</u>			<u>2.1</u>	<u>2.2</u>
<u>Undiluted</u>	<u>5 G.P.</u>	<u>Rub on</u> <u>10 days</u>				
						<u>24 hr. SEVERE ERYTHEMA, SLIGHT EDEMA</u>
						<u>10 days SEVERE ERYTHEMA SLIGHT EDEMA.</u>

*G.P. = Guinea Pig

Remarks: