

E. I. du Pont de Nemours and Co.
Haskell Laboratory for Toxicology and Industrial Medicine
Haskell Laboratory Report No. 55-59

cc: W. J. Brehm (6)

Medical Research Project MR-125

Material Tested: Hexafluoropropylene Epoxide*	Haskell No.: 2396
Submitted by: W. J. Brehm, Polychemicals Department, Research and Development Div.	Other Codes: 1st sample B-5447 2nd sample B-5487

Acute Testing (Inhalation)

Species	Conc. or Dosage		Duration hours	Mortality	Toxic Signs	Pathological Changes	ALC
	mg/lit	ppm					
ChR-CD Male Albino Rats	27.2	4000	1	2/2	Pallor, labored breathing, convulsions.	Acute pulmonary edema.	2000 ppm for 4 hrs.
	13.6	2000	2 1/2-3	2/2	Pallor, labored breathing.	Acute pulmonary con- gestion and edema.	
	6.79	1000	4	0/2	Transient labored breath- ing during exposure, tran- sient weight loss.	None attributable to exposure.	
	3.40	500	4	0/2	None.	None.	

Comments:

Acute inhalation studies on hexafluoropropylene epoxide showed that it has an approximate lethal concentration of 2000 ppm for 4 hours. It is, therefore, a compound of moderate toxicity and of the same order as HFP. At concentrations which were lethal for rats it caused fatal pulmonary edema. Slight effects of pulmonary irritation were observed at 1000 ppm. There were no other tissue changes attributable to the material, nor was there clinical or pathological evidence of kidney injury as had been observed in tests with hexafluoropropylene (MR-421). It is recommended that subacute toxicity studies be made to determine if it is cumulatively toxic.

Reported by: Margaret Ann Delaplane

Date: December 23, 1959
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Approved by: [Signature]
D B [Signature]

Jonathan W. Williams

* Contains not more than 1.0% HFP.