HOW DOES STYRENE AFFECT HUMAN HEALTH AND THE ENVIRONMENT?

Effects of styrene on human health and the environment depend on how much styrene is present and the length and frequency of exposure. Effects also depend on the health of a person or the condition of the environment when exposure occurs.

Styrene vapor irritates the eyes, the nose, and the throat. Styrene vapor can also adversely affect the human nervous system, causing adverse eye effects. These effects are not likely to occur at levels of styrene that are normally found in the environment.

Human health effects associated with breathing small amounts of styrene over long periods of time in the workplace include alterations in vision, hearing loss and increased reaction times. Other human health effects associated with exposure to small amounts of styrene over long periods of time are not known. EPA is currently reviewing the potential for styrene to cause cancer in humans. Laboratory studies show that repeated oral exposure to large amounts of styrene cause cancer and adversely affects the blood and the liver of animals. Laboratory studies also show that repeated exposure to large amounts of styrene in air can damage the respiratory system of animals.

Styrene has moderate toxicity to aquatic life. Styrene by itself is not likely to cause environmental harm at levels normally found in the environment. Styrene can contribute to smog formation when it reacts with other volatile substances in air.

WHAT EPA OFFICES OR OTHER FEDERAL AGENCIES OR OTHER GROUPS CAN I CONTACT FOR ADDITIONAL INFORMATION ON STYRENE?

EPA OFFICE	LAW	PHONE NUMBER	
Pollution Prevention & Toxics	Emergency Planning and Community Right-to-Know Act (EPCRA) (§ 313/ Toxics Release Inventory data)	(202) 260-1531	
	Toxic Substances Control Act (TSCA) (§8A)	(202) 554-1404	
Air	Clean Air Act (§111, §112B)	(919) 541-0888	
Solid Waste & Emergency Response	Resource Conservation and Recovery Act (RCRA)		
	Comprehensive Environmental Response, Compensation, and Liability Act (Superfund)	(800) 535-0202	
Water	Clean Water Act (§311)	(202) 260-7588	
	Safe Drinking Water Act (Drinking Water Standard: 0.1 mg/L)	(800) 426-4791	

For general information on reducing or eliminating industrial pollutants through technology transfer, education, and public awareness, contact the Pollution Prevention Information Clearinghouse, (202) 260-1023.

OTHER FEDERAL AGENCY/DEPARTMENT OR GROUP	PHONE NUMBER	
Agency for Toxic Substances and Disease Registry	(404) 639-6000	
American Conference of Governmental Industrial Hygienists	(513) 742-2020	
Consumer Product Safety Commission	(301) 504-0994	
Food and Drug Administration	(301) 443-3170	
National Institute for Occupational Safety & Health	(800) 356-4674	
Occupational Safety & Health Administration (Check local phone book for phone number under Department of Labor)	9 2 94	

The Support Document for this and other OPPT Chemical Fact Sheets can be found on the Internet at: http://www.epa.gov/chemfact