

HOW DOES METHYL METHACRYLATE AFFECT HUMAN HEALTH AND THE ENVIRONMENT?

Effects of methyl methacrylate on human health and the environment depend on how much methyl methacrylate 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.

Breathing methyl methacrylate for short periods of time irritates the nose and throat. It also causes headaches and fatigue. Methyl methacrylate is a potent skin sensitizer in laboratory animals. These effects are not likely to occur at levels of methyl methacrylate that are normally found in the environment.

Human health effects associated with breathing or otherwise consuming small amounts of methyl methacrylate over long periods of time are not known. Workers repeatedly exposed to methyl methacrylate have reported allergic reactions, pain in fingers and toes, and fatigue. Laboratory studies show that repeated exposure to large amounts of methyl methacrylate in air damages the lining of the nose and adversely affects the lungs, the liver, the spleen, and the bone marrow of animals. Studies also show that repeated oral exposure to large amounts of methyl methacrylate causes stomach ulcers in animals.

Methyl methacrylate has low toxicity to aquatic life. By itself it is not likely to cause environmental harm at levels normally found in the environment. Methyl methacrylate can contribute to the formation of photochemical smog 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 METHYL METHACRYLATE?

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)	(202) 554-1404
Air	Clean Air Act (§111, §112B)	(919) 541-0888
Solid Waste & Emergency Response	Resource Conservation and Recovery Act (RCRA)	(800) 535-0202
	Comprehensive Environmental Response, Compensation, and Liability Act (Superfund)	
Water	Clean Water Act	(202) 260-7588

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 <i>(Check local phone book for phone number under Department of Labor)</i>	

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