

## 7. REGULATIONS AND ADVISORIES

Vinyl acetate is on the list of chemicals appearing in "Toxic Chemicals Subject to Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986" (EPA 1987c). ATSDR has derived an intermediate inhalation MRL of 0.01 ppm based on respiratory effects seen in mice (Hazleton 1980b).

The international, national, and state regulations and guidelines regarding vinyl acetate in air, water, and other media are summarized in Table 7-1.

## 7. REGULATIONS AND ADVISORIES

TABLE 7-1. Regulations and Guidelines Applicable to Vinyl Acetate

Agency	Description	Information	References
<u>INTERNATIONAL</u>			
IARC	Carcinogenic classification	Group 3 <sup>a</sup>	IARC 1987
<u>NATIONAL</u>			
Regulations:			
a. Air:			
OSHA	PEL TWA (8-hr, final rule) STEL	10 ppm (35 mg/m <sup>3</sup> ) 20 ppm (70 mg/m <sup>3</sup> )	OSHA 1989
b. Water:			
EPA OWRS	NPDES permit application testing requirements: Toxic pollutants and hazardous substances required to be identified by existing dischargers if expected to be present (vinyl acetate)	Yes	EPA 1983 (40 CFR 122, Appendix D, Table V)
c. Food:			
FDA	May be safely used as a coating or as a component of a coating which is the food-contact surface of polyolefin films intended for packaging food; vinyl acetate/crotonic acid copolymer	Yes	FDA 1977 (21 CFR 175.350)
	Vinyl acetate is regulated as a modifier of food starch. The acetyl groups in modified sauce-starch not to exceed 2.5%	Yes	FDA 1991 (21 CFR 172.892)
d. Other:			
EPA OERR	CERCLA reportable quantity (final)	5000 pounds (2270 kg)	EPA 1985a (40 CFR 302.4); EPA 1986a (40 CFR 117.3)
	Extremely hazardous substance TPQ	1000 pounds (454 kg)	EPA 1987a (40 CFR 355, Appendix B)
EPA OSW	Designation of hazardous substances	Yes	EPA 1978 (40 CFR 116.4)
	List of CERCLA hazardous substances	Yes	EPA 1985b (40 CFR 302.4, Appendix A)
	Listing as hazardous waste constituent	No	EPA 1986b (40 CFR 261, Appendix VIII)
	Groundwater monitoring requirement	Yes	EPA 1987b (40 CFR 264, Appendix IX)

## 7. REGULATIONS AND ADVISORIES

TABLE 7-1. (Continued)

Agency	Description	Information	References
EPA OTS	Toxic chemical release reporting; community right-to-know (proposed)	Yes	EPA 1987c
OSHA	Meets criteria for proposed medical records rule	Yes	OSHA 1982
<b>Guidelines:</b>			
<b>a. Air:</b>			
ACGIH	TLV TWA	10 ppm (35 mg/m <sup>3</sup> )	ACGIH 1986
	STEL	20 ppm (70 mg/m <sup>3</sup> )	ACGIH 1986
	STEL (proposed)	15 ppm (53 mg/m <sup>3</sup> )	ACGIH 1992
	Carcinogen Classification (proposed)	A3 <sup>b</sup>	ACGIH 1992
EPA	Hazardous air pollutant under Section 112 of Clean Air Act Amendment	Yes	U.S. Congress 1990
EPA	RfC (Inhalation)	0.2 mg/m <sup>3</sup> (0.06 ppm)	IRIS 1991
	RfD (Oral)	No data	IRIS 1991
NIOSH	Ceiling (15-min)	4 ppm (14 mg/m <sup>3</sup> )	NIOSH 1978a
<b>STATE</b>			
<b>Regulations and Guidelines:</b>			
<b>a. Air:</b>	<b>Acceptable ambient air concentrations</b>		<b>NATICH 1988</b>
Connecticut	(8-hr)	0.6000 mg/m <sup>3</sup>	
Massachusetts	(24-hr)	0.0096 mg/m <sup>3</sup>	
Nevada	(8-hr)	0.7140 mg/m <sup>3</sup>	
North Dakota	(1-hr)	0.6000 mg/m <sup>3</sup>	
North Dakota	(8-hr)	0.3000 mg/m <sup>3</sup>	
Virginia	(24-hr)	0.0050 mg/m <sup>3</sup>	

<sup>a</sup>The Working Group on the Evaluation of Carcinogenic Risks to Humans concluded that this agent is not classifiable as a human carcinogen.

<sup>b</sup>Group A3 carcinogen = The agent is carcinogenic in experimental animals at a relatively high dose, by routes(s) of administration, at site(s), of histologic types(s), or by mechanism(s) which are not considered relevant to worker exposure. Available epidemiological studies do not confirm an increased risk of cancer in exposed humans. Available evidence suggests that the agent is not likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure.

ACGIH = American Conference of Governmental Industrial Hygienists; A3 = animal carcinogen;  
 CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act; EPA = Environmental Protection Agency; FDA = Food and Drug Administration; IARC = International Agency for Research on Cancer; Clearinghouse;  
 NIOSH = National Institute for Occupational Safety and Health; NPDES = National Pollutant Discharge Elimination System; OERR = Office of Emergency and Remedial Response; OSHA = Occupational Safety and Health Administration;  
 OSW = Office of Solid Wastes; OTS = Office of Toxic Substances; OWRS = Office of Water Regulations and Standards; PEL = Permissible Exposure Limit; RfC = Reference concentration; RfD = Reference dose;  
 STEL = Short Term Exposure Limit; TLV = Threshold Limit Value; TPQ = Threshold Planning Quantity;  
 TWA = Time-Weighted Average

