

CHAPTER 7. REGULATIONS AND GUIDELINES

Pertinent international and national regulations, advisories, and guidelines regarding dinitrocresols in air, water, and other media are summarized in Table 7-1. This table is not an exhaustive list, and current regulations should be verified by the appropriate regulatory agency.

ATSDR develops MRLs, which are substance-specific guidelines intended to serve as screening levels by ATSDR health assessors and other responders to identify contaminants and potential health effects that may be of concern at hazardous waste sites. See Section 1.3 and Appendix A for detailed information on the MRLs for dinitrocresols.

Table 7-1. Regulations and Guidelines Applicable to Dinitrocresols

Agency	Description	Information	Reference
Air			
EPA	RfC	No data	IRIS 2017
WHO	Air quality guidelines	No data	WHO 2010
Water & Food			
EPA	Drinking water standards and health advisories	No data	EPA 2012
	National primary drinking water regulations	No data	EPA 2009
	RfD	No data	IRIS 2017
WHO	Drinking water quality guidelines	No data	WHO 2017
FDA	EAFUS	No data ^a	FDA 2013
Cancer			
ACGIH	Carcinogenicity classification	No data	ACGIH 2016
HHS	Carcinogenicity classification	No data	NTP 2016
EPA	Carcinogenicity classification	No data	IRIS 2017
IARC	Carcinogenicity classification	No data	IARC 2017
Occupational			
ACGIH	TLV DNOC	0.2 mg/m ^{3b}	ACGIH 2016
OSHA	PEL (8-hour TWA) for general industry, shipyards and construction DNOC	0.2 mg/m ^{3b}	OSHA 2016a , 2016b , 2016c
NIOSH	REL (up to 10-hour TWA) DNOC IDLH DNOC	0.2 mg/m ^{3b} 5 mg/m ^{3c}	NIOSH 1994 , 2016

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Agency	Description	Information	Reference
Emergency Criteria			
EPA	AEGLs-air	No data	EPA 2016
AIHA	ERPGs	No data	AIHA 2015
DOE	PACs-air		DOE 2016a
	DNOC		
	PAC-1 ^d	0.6 mg/m ³	
	PAC-2 ^d	0.83 mg/m ³	
	PAC-3 ^d	5 mg/m ³	

^aThe EAFUS list of substances contains ingredients added directly to food that FDA has either approved as food additives or listed or affirmed as GRAS.

^bSkin notation: potential significant contribution to the overall exposure by the cutaneous route.

^cBased on acute toxicity data in humans and animals.

^dDefinitions of PAC terminology are available from DOE (2016b).

ACGIH = American Conference of Governmental Industrial Hygienists; AEGL = acute exposure guideline levels; AIHA = American Industrial Hygiene Association; DNOC = 4,6-dinitro-*o*-cresol; DOE = Department of Energy; EAFUS = Everything Added to Food in the United States; EPA = Environmental Protection Agency; ERPG = emergency response planning guidelines; FDA = Food and Drug Administration; GRAS = generally recognized as safe; HHS = Department of Health and Human Services; IARC = International Agency for Research on Cancer; IDLH = immediately dangerous to life or health concentrations; IRIS = Integrated Risk Information System; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; PAC = Protective Action Criteria; PEL = permissible exposure limit; REL = recommended exposure limit; RfC = inhalation reference concentration; RfD = oral reference dose; TLV = threshold limit values; TWA = time-weighted average; WHO = World Health Organization