

7. REGULATIONS AND ADVISORIES

The international, national, and state regulations and guidelines regarding Otto Fuel II and its major components in air, water, and other media are summarized in Table 7-1.

ATSDR has derived three MRL values for propylene glycol dinitrate, the major component of Otto Fuel II. An acute inhalation MRL of 0.003 ppm was derived for propylene glycol dinitrate based on altered visual evoked responses in humans (Stewart et al. 1974). An intermediate and chronic inhalation MRL of 0.00004 ppm was derived for propylene glycol dinitrate based on decreased levels of hematocrit, hemoglobin, red blood cells, and reticulocytes and increased levels of methemoglobin in dogs (Air Force 1985a). There is no EPA reference dose (RfD) or reference concentration (RfC) for Otto Fuel II or its major components.

Under the Hazardous Materials Transportation Act, Otto Fuel II is designated as a hazardous substance subject to special requirements for packaging, labeling, and transportation (DOT 1989a, 1989b).

7. REGULATIONS AND ADVISORIES

Table 7-1. Regulations and Guidelines Applicable to Otto Fuel II and Its Components

Agency	Description	Information	Reference
<u>NATIONAL</u>			
Regulations:			
a. Other:			
DOT	Hazardous Material Transportation Act: Class A explosive (high explosive); designated as a hazardous substance subject to special requirements for packaging, labeling, and transportation (explosive torpedo)	Yes	DOT 1989a (49 CFR 172.101); DOT 1989b
Guidelines:			
a. Air			
ACGIH	TLV TWA (skin designation) Propylene glycol dinitrate	0.05 ppm (0.34 mg/m ³)	ACGIH 1994
NIOSH	REL - TWA (skin designation) Propylene glycol dinitrate	0.05 ppm (0.3 mg/m ³)	NIOSH 1992
<u>STATE</u>			
Regulations and Guidelines:			
a. Air:			
	Acceptable Ambient Air Concentrations Propylene glycol dinitrate		NATICH 1992
CT	8 hr avg. time	6.00 µg/m ³	
FL- Pinellas	8 hr avg. time	3.0 µg/m ³	
FL-Pinellas	24 hr avg. time	7.20x10 ⁻¹ µg/m ³	
ND	8 hr avg. time	3.40x10 ⁻³ mg/m ³	
NV	8 hr avg. time	7.0x10 ⁻³ mg/m ³	
TX	30 min avg. time	3.00 µg/m ³	
TX	Annual avg. time	3.00x10 ⁻¹ µg/m ³	
VA	24 hr avg. time	57.0 µg/m ³	
WA/SW	24 hr avg. time	1.00 µg/m ³	

ACGIH = American Conference of Governmental and Industrial Hygienists; DOT = Department of Transportation; NATICH = National Air Toxics Information Clearinghouse; NIOSH = National Institute of Occupational Safety and Health; REL = Recommended Exposure Level; TLV = Threshold Limit Value; TWA = Time Weighted Average