

# NIOSH Pocket Guide to Chemical Hazards

<b>Naphthalene</b>		CAS 91-20-3	
C <sub>10</sub> H <sub>8</sub>		RTECS QJ0525000	
<b>Synonyms &amp; Trade Names</b> Naphthalin, Tar camphor, White tar		<b>DOT ID &amp; Guide</b> 1334 <a href="#">133</a> (crude or refined) 2304 <a href="#">133</a> (molten)	
<b>Exposure Limits</b>		NIOSH REL: TWA 10 ppm (50 mg/m <sup>3</sup> ) ST 15 ppm (75 mg/m <sup>3</sup> )	
		OSHA PEL <sup>†</sup> : TWA 10 ppm (50 mg/m <sup>3</sup> )	
IDLH 250 ppm See: <a href="#">91203</a>		<b>Conversion</b> 1 ppm = 5.24 mg/m <sup>3</sup>	
<b>Physical Description</b>			
Colorless to brown solid with an odor of mothballs. [Note: Shipped as a molten solid.]			
MW: 128.2	BP: 424°F	MLT: 176°F	Sol: 0.003%
VP: 0.08 mmHg	IP: 8.12 eV		Sp.Gr: 1.15
Fl.P: 174°F	UEL: 5.9%	LEL: 0.9%	
Combustible Solid, but will take some effort to ignite.			
<b>Incompatibilities &amp; Reactivities</b>			
Strong oxidizers, chromic anhydride			
<b>Measurement Methods</b>			
NIOSH <a href="#">1501</a> ; OSHA <a href="#">35</a>			
See: <a href="#">NMAM</a> or <a href="#">OSHA Methods</a>			
<b>Personal Protection &amp; Sanitation</b>		<b>First Aid</b> ( <a href="#">See procedures</a> )	
Skin: Prevent skin contact		Eye: Irrigate immediately	
Eyes: Prevent eye contact		Skin: Molten flush immediately/solid-liquid soap wash promptly	
Wash skin: When contaminated		Breathing: Respiratory support	
Remove: When wet or contaminated		Swallow: Medical attention immediately	
Change: Daily			

**Respirator Recommendations** NIOSH/OSHA

**Up to 100 ppm:** (APF = 10) Any chemical cartridge respirator with organic vapor cartridge(s) in combination with a dust and mist filter\*/(APF = 10) Any supplied-air respirator\*

**Up to 250 ppm:** (APF = 25) Any supplied-air respirator operated in a continuous-flow mode\*/(APF = 50) Any chemical cartridge respirator with a full facepiece and organic vapor cartridge(s) in combination with a high-efficiency particulate filter/(APF = 25) Any powered, air-purifying respirator with organic vapor cartridge(s) in combination with a dust and mist filter\*/(APF = 50) Any self-contained breathing apparatus with a full facepiece/(APF = 50) Any supplied-air respirator with a full facepiece

**Emergency or planned entry into unknown concentrations or IDLH conditions:** (APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode/(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus

**Escape:** (APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister having a high-efficiency particulate filter/Any appropriate escape-type, self-contained breathing apparatus

**Exposure Routes** inhalation, skin absorption, ingestion, skin and/or eye contact

**Symptoms** Irritation eyes; headache, confusion, excitement, malaise (vague feeling of discomfort); nausea, vomiting, abdominal pain; irritation bladder; profuse sweating; jaundice; hematuria (blood in the urine), renal shutdown; dermatitis, optical neuritis, corneal damage

**Target Organs** Eyes, skin, blood, liver, kidneys, central nervous system

See also: [INTRODUCTION](#) See **MEDICAL TESTS:** [0152](#)