

# NIOSH Pocket Guide to Chemical Hazards

<b>Isophorone diisocyanate</b>		CAS 4098-71-9	
$C_{12}H_{18}N_2O_2$		RTECS <a href="#">NQ9370000</a>	
<b>Synonyms &amp; Trade Names</b> IPDI; 3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl-isocyanate; Isophorone diamine diisocyanate		<b>DOT ID &amp; Guide</b> 2290 <a href="#">156</a>	
<b>Exposure Limits</b>	NIOSH REL: TWA 0.005 ppm (0.045 mg/m <sup>3</sup> ) ST 0.02 ppm (0.180 mg/m <sup>3</sup> ) [skin]		
	OSHA PEL†: none		
IDLH N.D. See: <a href="#">IDLH INDEX</a>		<b>Conversion</b> 1 ppm = 9.09 mg/m <sup>3</sup>	
<b>Physical Description</b> Colorless to slightly yellow liquid with a pungent odor.			
MW: 222.3	BP: ?	FRZ: -76°F	Sol: Decomposes
VP: 0.0003 mmHg	IP: ?		Sp.Gr: 1.06
Fl.P: 311°F	UEL: ?	LEL: ?	
Class IIIB Combustible Liquid: Fl.P. at or above 200°F.			
<b>Incompatibilities &amp; Reactivities</b> Water, alcohols, phenols, amines, mercaptans, amides, urethanes, ureas [Note: Reacts with water to form carbon dioxide.]			
<b>Measurement Methods</b> OSHA <a href="#">PV2034</a> See: <a href="#">NMAM</a> or <a href="#">OSHA Methods</a>			
<b>Personal Protection &amp; Sanitation</b> Skin: Prevent skin contact Eyes: Prevent eye contact Wash skin: When contaminated Remove: When wet or contaminated Change: Daily Provide: Quick drench		<b>First Aid (See procedures)</b> Eye: Irrigate immediately Skin: Water flush immediately Breathing: Respiratory support Swallow: Medical attention immediately	
<a href="#">Important additional information about respirator selection</a> <b>Respirator Recommendations</b> NIOSH <b>Up to 0.05 ppm:</b> (APF = 10) Any supplied-air respirator* <b>Up to 0.125 ppm:</b> (APF = 25) Any supplied-air respirator operated in a continuous-flow mode* <b>Up to 0.25 ppm:</b> (APF = 50) Any self-contained breathing apparatus with a full facepiece/(APF = 50) Any supplied-air respirator with a full facepiece <b>Up to 1 ppm:</b> (APF = 2000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode <b>Emergency or planned entry into unknown concentrations or IDLH conditions:</b> (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 <b>Escape:</b> (APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister/Any appropriate escape-type, self-contained breathing apparatus			
<b>Exposure Routes</b> inhalation, skin absorption, ingestion, skin and/or eye contact			
<b>Symptoms</b> Irritation eyes, skin, respiratory system; chest tightness, dyspnea (breathing difficulty), cough, sore throat; bronchitis, wheezing, pulmonary edema; possible respiratory sensitization, asthma			
<b>Target Organs</b> Eyes, skin, respiratory system			
See also: <a href="#">INTRODUCTION</a> See ICSC CARD: <a href="#">0499</a>			

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