

NIOSH Pocket Guide to Chemical Hazards

Formalin (as formaldehyde)			CAS
			RTECS
Synonyms & Trade Names Formaldehyde solution [Note: Formalin is an aqueous solution that is 37% formaldehyde by weight; inhibited solutions usually contain 6-12% methyl alcohol. Also see specific listings for Formaldehyde and Methyl alcohol.]			DOT ID & Guide 1198 132 2209 132
Exposure Limits	NIOSH REL: Ca TWA 0.016 ppm C 0.1 ppm [15-minute] See Appendix A		
	OSHA PEL: [1910.1048] TWA 0.75 ppm ST 2 ppm		
IDLH Ca [20 ppm]		Conversion	
Physical Description Colorless liquid with a pungent odor.			
MW: Varies	BP: 214°F	FRZ: ?	Sol: Miscible
VP: 1 mmHg	IP: ?		Sp.Gr(77°F): 1.08
Fl.P: 185°F	UEL: 73%	LEL: 7%	
Class IIIA Combustible Liquid: Fl.P. at or above 140°F and below 200°F.			
Incompatibilities & Reactivities Strong oxidizers, alkalis & acids; phenols; urea; oxides; isocyanates; caustics; anhydrides			
Measurement Methods NIOSH 2016, 2541, 3500, 3800; OSHA ID205, 52			
Personal Protection & Sanitation Skin: Prevent skin contact Eyes: Prevent eye contact Wash skin: When contaminated Remove: When wet or contaminated Change: No recommendation Provide: Eyewash, Quick drench		First Aid (See procedures) Eye: Irrigate immediately Skin: Water flush promptly Breathing: Respiratory support Swallow: Medical attention immediately	
Respirator Recommendations NIOSH At concentrations above the NIOSH REL, or where there is no REL, at any detectable concentration: (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 canister providing protection against the compound of concern/Any appropriate escape-type, self-contained breathing apparatus			
Exposure Routes inhalation, ingestion, skin and/or eye contact			
Symptoms Irritation eyes, nose, throat, respiratory system; lacrimation (discharge of tears); cough; wheezing, dermatitis; [potential occupational carcinogen]			

Target Organs Eyes, skin, respiratory system
Cancer Site [nasal cancer]
See also: INTRODUCTION