

Safety & Health Quick List

Chemical/ Product Name:	Propylene Oxide	CAS No:	75-46-9
Synonym:	PO		

Hazard Statements: Extremely flammable liquid and vapour.
 Harmful if swallowed.
 Toxic in contact with skin or if inhaled.
 Causes skin irritation.
 Causes serious eye irritation.
 May cause respiratory irritation.
 May cause genetic defects.
 May cause cancer.

NFPA Ratings:	4-Dangerous	3-Severe	2-Moderate	1-Slightly Hazardous
GHS Ratings:	1-Dangerous	2-Severe	3-Moderate	4-Slightly Hazardous

Physical Properties:

NFPA Rating: Health	3	Auto Ignition Temperature	752 F
NFPA Rating: Flammability	4	Solubility in Water	42.5 -25%
NFPA Rating: Reactivity	2	Specific Gravity	0.8304
GHS Classification: Flammability	1	Flash Point	-36.4
GHS Classification: Health Hazard	1B	Vapor Pressure (@ 64F)	10.403 psi
GHS Classification: Harmful	2	Max Concentration (@ 64F)	99.80%
Fire Extinguisher Type	Water	Boiling Point	94 F
Freeze Point	-170 F	RQ	100 lbs
LEL%	1.60%		
UEL%	41.60%		
Vapor Density	74,000 psi @ 77 F		

Exposure Guidelines

PEL/TLV	100 ppm	Corrosive	N/A
STEL	N/A	Irritant	2
Ceiling	N/A	IDLH	N/A
Skin Notation (S)	2	Odor Threshold	35 ppm
Carcinogen (A1-A4)	1B	Sensitizer	N/A

Other Hazards:

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Emergency Response

EPRG-1	50 ppm	isolate for at least 50 meters (150 ft) in all directions
EPRG-2	250 ppm	initial downwind evacuation for at least 300 meters (1000 ft)
EPRG-3	750 ppm	Isolate for at least 800 meters (1/2 mile) in all directions
Monitoring Method	N/A	

Normal Tasks

Sampling
 Drum/Tote Filling
 Strapping Tank/Truck
 Hose Disconnect Unclear (Camlock Fitting)
 Hose Disconnect Unclear (Dry Disconnect)
 Line/Equipment Opening Unclear
 Line/Equipment Opening Clear
 Contaminated Equipment in Maintenance Shop
 which can't be cleaned
 Tank Cleaning (No Chemicals Present)
 Tank Cleaning (Chemicals Present)

PPE Group

Group 9
Group 9
Group 9
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Group 9
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Emergency Response Tasks

Small Spill
 Medium Spill
 Large Spill
 Downwind Monitoring (Vapor Only)
 Liquid Contact (HAZMAT)

PPE Group

Group 9
Group 9
Group 9
Group 9
Group 9

Lab Handling

Inside Hood
 Outside Hood

PPE Group

Group 13
Group 13

NUMBER	KEY CODE	DESCRIPTION
GROUP 2	GENERAL PROCESS AREA	Standard PPE - Hard Hat, Nomex Coveralls, Safety Side-Shield Glasses, Work Gloves (Leather)
GROUP 9	TYCHEM SUIT	Standard PPE (Group 2) with Chemical Gloves, Boots, Tychem Suit, and the Required Respirator
GROUP 11	STANDARD LAB -L	Nomex Lab Coat, Safety Side-Shield Glasses, Latex Gloves
GROUP 12	STANDARD LAB -N	Nomex Lab Coat, Safety Side-Shield Glasses, Nitrile Gloves
GROUP 13	LAB & RESPIRATOR	Group 11 or 12 along with a Cartridge Respirator
Respirator Type	Full Face, Supplied Air	
Chemical Glove Type	Butyl Rubber	

PPE Example

