



PREFERRED CHEMICAL NAME:		PROPANE		CAS #:	74-98-6
Molecular Wt.	44.09	Molecular Formula:	C ₃ H ₈	Structural Molecular Formula:	CH ₃ CH ₂ CH ₃
Alternate Chemical Names:		NA			
DOT UN # :	1075 (petroleum gases, liquefied) 1978 (propane)	RTECS # :	TX2275000	NFPA 704: H-F-R-Special Hazard:	2 - 4 - 0
Physical State - Description:		Colorless Gas; Odorless When Pure; Can Have an Odor Like Natural Gas Odor Threshold: 5000 to 20000 ppm			

PHYSICAL DATA					
Property	Value	Source	Property	Value	Source
Melting – Freezing Point (@ saturation pressure):	-305.82°F (-187.68°C) @ 14.696 psia	GPSA	Boiling Point:	-43.73°F (-42.07°C) @ 14.696 psia	GPSA
Critical Temperature:	206.01°F (96.67°C)	GPSA	Critical Pressure:	616.3 psia	GPSA
Autoignition Temperature:	842°F (450°C)	GENIUM	Flash Point (closed cup):	-156.0°F (-104.444°C)	GENIUM
Lower Flammability Limit:	2.1%	GPSA	Upper Flammability Limit:	9.5%	GPSA
Vapor Pressure:	188.0 psia @ 100°F (38°C)	GPSA	Vapor Specific Gravity (air = 1):	1.5225	GPSA
Liquid Density (weight in vacuum, saturation pressure):	4.231 lb/gal @ 60°F (16°C)	GPSA	Vapor Density:	0.116 lb/cu. ft. @ 14.696 psia @ 60°F (16°C)	GPSA
Liquid Specific Gravity (water = 1, saturation pressure):	0.5075 @ 60°F/60°F (16°C/16°C)	GPSA	Conversion:	1 ppm = 1.80 mg/m ³ 1 ppm = 0.0018 mg/l	NIOSH

HAZARD OVERVIEWS		
Hazard	Overview	Source
HEALTH	Irritating to eyes/respiratory tract. Also Causes: asphyxiation (reduced oxygen available for breathing), frostbite.	GENIUM
FIRE	Flammable. Use dry chemical, carbon dioxide, or water spray. Allow small amount of gas to remain burning (burns with a luminous, smokey flame making it easy to ascertain when all is burned. This will prevent build-up of explosive levels). If feasible, stop flow of gas. Use water to cool fire-exposed containers, tanks and surroundings. Do not completely extinguish flame unless gas flow is shut off.	GENIUM
REACTIVITY	Stable, as a liquid in steel tanks under its own vapor pressure. Hazardous polymerization cannot occur. Avoid: oxidation with a deficiency of oxygen. Incompatible with: oxidizers; chlorine dioxide; barium peroxide and heat. Hazardous decomposition products: acrid smoke; irritating fumes.	GENIUM
SPECIAL HAZARD	None.	GENIUM

TOXICITY/EXPOSURE INFORMATION					
Data Term	Toxic Limit Value	Source	Data Term	Toxic Limit Value	Source
ERPG-1 :	None Listed	AIHA	TLV TWA :	1000 ppm	ACGIH
ERPG-2 :	None Listed	AIHA	TLV STEL :	None Listed	ACGIH
ERPG-3 :	None Listed	AIHA	PEL TWA:	1000 ppm (1800 mg/m ³)	OSHA
IDLH :	2100 ppm	NIOSH	PEL STEL:	None Listed	OSHA



TOXICITY/EXPOSURE INFORMATION (continued)					
Classification	10 Min Exposure	30 Min Exposure	1 Hour Exposure	4 Hour Exposure	8 Hour Exposure
AEGL-1 (interim):	10000 ppm	6900 ppm	5500 ppm	5500 ppm	5500 ppm
AEGL-2 (interim):	17000 ppm	17000 ppm	17000 ppm	17000 ppm	17000 ppm
AEGL-3 (interim):	33000 ppm	33000 ppm	33000 ppm	33000 ppm	33000 ppm

LISTING OF SUBSTANCE ON PERTINENT SAFETY/ENVIRONMENTAL PROGRAMS						
Y/N	Program	Statute	Regulation	Limits or Values		
N	EPCRA EHS	Section 302 of SARA Title III Emergency Planning	40 CFR Part 355	TPQ:		
				RQ:		
N	CERCLA	Section 304 of SARA Title III Emergency Notification	40 CFR Part 302	RQ:		
N	EPCRA Section 313	Section 313 of SARA Title III Toxic Release Inventory Reporting	40 CFR Part 372			
Y	RMP	Section 112(r) of CAAA 1990 Risk Management Plan	40 CFR Part 68	TQ:	10,000	lbs
Y	PSM	Section 304 of CAAA 1990 Process Safety Management	29 CFR Part 1910.119	TQ:	10,000	lbs
Y	NDEP-CAPP	Nevada Revised Statutes 459.3816 Chemical Accident Prevention Program	NAC 459.9533	TQ:	10,000	lbs