



PREFERRED CHEMICAL NAME:		CHLORINE		CAS #:	7782-50-5
Molecular Wt.	70.906	Molecular Formula:	Cl ₂	Structural Molecular Formula:	Cl ₂
Alternate Chemical Names:		NA			
DOT UN # :	1017	RTECS # :	FO2100000	NFPA 704: H-F-R-Special Hazard:	4 - 0 - 0 - OX
Physical State - Description:		Greenish-Yellow Gas With a Pungent, Irritating Odor [Note: Shipped as a Liquefied Compressed Gas] Odor Threshold: 0.0020 mg/L (water); 0.31 ppm (air)			

PHYSICAL DATA					
Property	Value	Source	Property	Value	Source
Melting – Freezing Point:	-149.78°F (-100.98°C)	CI	Boiling Point:	-29.15 °F @ 1 atm	CI
Critical Temperature:	290.75°F (143.75°C)	CI	Critical Pressure:	1157.0 PSIA	CI
Autoignition Temperature:	Non-Flammable	CI	Flash Point:	Non-Flammable	CI
Lower Flammability Limit:	Non-Flammable	CI	Upper Flammability Limit:	Non-Flammable	CI
Vapor Pressure:	53.51 PSIA @ 32°F (0°C) 112.95 PSIA @ 77°F (25°C)	CI	Vapor Specific Gravity (air = 1):	2.485 @ 32°F (0°C) and 1 atm	CI
Liquid Density (Saturated Liquid):	91.56 lb/ft ³ @ 32°F (0°C) 88.76 lbs/ft ³ @ 60°F (15.6°C)	CI	Vapor Density:	0.2006 lb/ft ³ @ 32°F (0°C) and 1 atm	CI
Liquid Specific Gravity (water = 1):	1.467 @ 32°F (0°C)	CI	Conversion:	1 ppm = 2.9 mg/m ³ 1 ppm = 0.0029 mg/l	USEPA

HAZARD OVERVIEWS		
Hazard	Overview	Source
HEALTH	Corrosive causes burns to eyes/skin/respiratory tract. Poison. Also Causes: inhalation of high levels can cause difficulty breathing, dizziness, and pulmonary edema which can be fatal. Chronic Effects: tooth erosion, chloracne.	GENIUM
FIRE	Noncombustible, but is a strong oxidizer capable of igniting combustible materials. Use extinguishing agents suitable for surrounding fire.	GENIUM
REACTIVITY	Stable. Hazardous polymerization cannot occur. Avoid: exposure to heat; moisture. Incompatible with: finely divided metals; combustibles; organic materials; moisture; water; steam; acetylene; alcohols; ammonia; arsenic; bismuth; boron; benzene; calcium; activated carbon; carbon disulfide; ether; ethane; ethylene; fluorine; glycerol; hydrazine; hydrocarbons; iodine; methane; oxomonoisilane; potassium; polypropylene; silicon; some forms of plastics, rubber, and coatings. Hazardous decomposition products: toxic chlorine products.	GENIUM
SPECIAL HAZARD	Oxidizer	GENIUM

TOXICITY/EXPOSURE INFORMATION					
Data Term	Toxic Limit Value	Source	Data Term	Toxic Limit Value	Source
ERPG-1 :	1 ppm	AIHA	TLV TWA :	0.5 ppm	ACGIH
ERPG-2 :	3 ppm	AIHA	TLV STEL :	1 ppm	ACGIH
ERPG-3 :	20 ppm	AIHA	PEL TWA:	1 ppm (3 mg/m ³) Ceiling	OSHA
IDLH :	10 ppm	NIOSH	PEL STEL:	None Listed	OSHA
Classification	10 Min Exposure	30 Min Exposure	1 Hour Exposure	4 Hour Exposure	8 Hour Exposure
AEGL-1 :	0.5 ppm	0.5 ppm	0.5 ppm	0.5 ppm	0.5 ppm
AEGL-2 :	2.8 ppm	2.8 ppm	2.0 ppm	1.0 ppm	0.71 ppm
AEGL-3 :	50 ppm	28 ppm	20 ppm	10 ppm	7.1 ppm



LISTING OF SUBSTANCE ON PERTINENT SAFETY/ENVIRONMENTAL PROGRAMS						
Y/N	Program	Statute	Regulation	Limits or Values		
Y	EPCRA EHS	Section 302 of SARA Title III Emergency Planning	40 CFR Part 355	TPQ:	100	lbs
				RQ:	10	lbs
Y	CERCLA	Section 304 of SARA Title III Emergency Notification	40 CFR Part 302	RQ:	10	lbs
Y	EPCRA Section 313	Section 313 of SARA Title III Toxic Release Inventory Reporting	40 CFR Part 372	MANUFACTURED/PROCESSED: 25,000 lbs OTHERWISE USED: 10,000 lbs		
Y	RMP	Section 112(r) of CAAA 1990 Risk Management Plan	40 CFR Part 68	TQ:	2,500	lbs
Y	PSM	Section 304 of CAAA 1990 Process Safety Management	29 CFR Part 1910.119	TQ:	1,500	lbs
Y	NDEP-CAPP	Nevada Revised Statutes 459.3816 Chemical Accident Prevention Program	NAC 459.9533	TQ:	1,500	lbs