

SULFURYL CHLORIDE

SCL

CAUTIONARY RESPONSE INFORMATION				4. FIRE HAZARDS	7. SHIPPING INFORMATION										
Common Synonyms	Watery liquid		Colorless to light yellow Acrid odor	4.1 Flash Point: Not flammable	7.1 Grades of Purity: 99%										
	Mixes and reacts violently with water. Poisonous gas is produced.			4.2 Flammable Limits in Air: Not flammable	7.2 Storage Temperature: Ambient										
	<p>Evacuate. Keep people away. Avoid contact with liquid and gas. Wear goggles, self-contained breathing apparatus, and rubber overclothing (including gloves). Notify local health and pollution control agencies. Protect water intakes.</p>			4.3 Fire Extinguishing Agents: Not pertinent	7.3 Inert Atmosphere: No requirement										
Fire	Not flammable. Flammable gas may be produced on contact with metals.			4.4 Fire Extinguishing Agents Not to Be Used: Water applied to adjacent fires should be handled carefully.	7.4 Venting: Pressure-vacuum										
Exposure	<p>CALL FOR MEDICAL AID.</p> <p>VAPOR Irritating to eyes, nose and throat. If inhaled, will cause coughing, difficult breathing, or loss of consciousness. Move to fresh air.</p> <p>IF IN EYES, hold eyelids open and flush with plenty of water. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen.</p> <p>LIQUID Will burn skin and eyes. Harmful if swallowed. Remove contaminated clothing and shoes. Flush affected areas with plenty of water. IF IN EYES, hold eyelids open and flush with plenty of water. IF SWALLOWED and victim is CONSCIOUS, have victim drink water or milk. DO NOT INDUCE VOMITING.</p>			4.5 Special Hazards of Combustion Products: Not pertinent	7.5 IMO Pollution Category: Currently not available										
Water Pollution	HARMFUL TO AQUATIC LIFE IN VERY LOW CONCENTRATIONS. May be dangerous if it enters water intakes. Notify local health and wildlife officials. Notify operators of nearby water intakes.			4.6 Behavior in Fire: Toxic and irritating gases are generated.	7.6 Ship Type: Currently not available										
				4.7 Auto Ignition Temperature: Not flammable	7.7 Barge Hull Type: Currently not available										
				4.8 Electrical Hazards: Not pertinent	8. HAZARD CLASSIFICATIONS										
				4.9 Burning Rate: Not flammable	8.1 49 CFR Category: Corrosive material										
				4.10 Adiabatic Flame Temperature: Currently not available	8.2 49 CFR Class: 8										
				4.11 Stoichiometric Air to Fuel Ratio: Not pertinent.	8.3 49 CFR Package Group: I										
				4.12 Flame Temperature: Currently not available	8.4 Marine Pollutant: No										
				4.13 Combustion Molar Ratio (Reactant to Product): Not pertinent.	8.5 NFPA Hazard Classification:										
				4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed	<table border="0"> <tr> <td>Category</td> <td>Classification</td> </tr> <tr> <td>Health Hazard (Blue).....</td> <td>3</td> </tr> <tr> <td>Flammability (Red).....</td> <td>0</td> </tr> <tr> <td>Instability (Yellow).....</td> <td>2</td> </tr> <tr> <td>Special (White).....</td> <td>W</td> </tr> </table>	Category	Classification	Health Hazard (Blue).....	3	Flammability (Red).....	0	Instability (Yellow).....	2	Special (White).....	W
Category	Classification														
Health Hazard (Blue).....	3														
Flammability (Red).....	0														
Instability (Yellow).....	2														
Special (White).....	W														
				5. CHEMICAL REACTIVITY	8.6 EPA Reportable Quantity: Not listed.										
				5.1 Reactivity with Water: Reacts vigorously with water, releasing hydrogen chloride fumes and forming sulfuric acid.	8.7 EPA Pollution Category: Not listed.										
				5.2 Reactivity with Common Materials: Acids formed by reaction with moisture attack metals and liberate flammable hydrogen gas.	8.8 RCRA Waste Number: Not listed										
				5.3 Stability During Transport: Stable	8.9 EPA FWPCA List: Not listed										
				5.4 Neutralizing Agents for Acids and Caustics: Acid formed by reaction with water can be neutralized by limestone, lime, or soda ash.	9. PHYSICAL & CHEMICAL PROPERTIES										
				5.5 Polymerization: Not pertinent	9.1 Physical State at 15°C and 1 atm: Liquid										
				5.6 Inhibitor of Polymerization: Not pertinent	9.2 Molecular Weight: 134.97										
				6. WATER POLLUTION	9.3 Boiling Point at 1 atm: 156.4°F = 69.1°C = 342.3°K										
				6.1 Aquatic Toxicity: Currently not available	9.4 Freezing Point: Not pertinent										
				6.2 Waterfowl Toxicity: Currently not available	9.5 Critical Temperature: Not pertinent										
				6.3 Biological Oxygen Demand (BOD): None	9.6 Critical Pressure: Not pertinent										
				6.4 Food Chain Concentration Potential: None	9.7 Specific Gravity: 1.67 at 20°C (liquid)										
				6.5 GESAMP Hazard Profile: Bioaccumulation: 0 Damage to living resources: (2) Human Oral hazard: (1) Human Contact hazard: II Reduction of amenities: XX	9.8 Liquid Surface Tension: Not pertinent										
					9.9 Liquid Water Interfacial Tension: Not pertinent										
					9.10 Vapor (Gas) Specific Gravity: 4.6										
					9.11 Ratio of Specific Heats of Vapor (Gas): 1.12										
					9.12 Latent Heat of Vaporization: 89.1 Btu/lb = 49.5 cal/g = 2.07 X 10 ⁵ J/kg										
					9.13 Heat of Combustion: Not pertinent										
					9.14 Heat of Decomposition: Not pertinent										
					9.15 Heat of Solution: -885.5 Btu/lb = -491.9 cal/g = -20.58 X 10 ⁵ J/kg										
					9.16 Heat of Polymerization: Not pertinent										
					9.17 Heat of Fusion: Currently not available										
					9.18 Limiting Value: Currently not available										
					9.19 Reid Vapor Pressure: Currently not available										
					NOTES										
1. CORRECTIVE RESPONSE ACTIONS	<p>Dilute and disperse dissolved material Stop discharge Chemical and Physical Treatment: Neutralize Do not add water to undissolved material</p> <p>2. CHEMICAL DESIGNATIONS</p> <p>2.1 CG Compatibility Group: Not listed. 2.2 Formula: SO₂Cl₂ 2.3 IMO/UN Designation: 8.0/1834 2.4 DOT ID No.: 1834 2.5 CAS Registry No.: 7791-25-5 2.6 NAERG Guide No.: 137 2.7 Standard Industrial Trade Classification: 52241</p>														
3. HEALTH HAZARDS	<p>3.1 Personal Protective Equipment: Chemical goggles and face shield; mask with acid-type canister; rubber gloves and boots.</p> <p>3.2 Symptoms Following Exposure: Vapors cause severe irritation of eyes and respiratory system. Liquid burns eyes and skin. If ingested, can cause severe burns of mouth and stomach.</p> <p>3.3 Treatment of Exposure: Call a doctor. INHALATION: remove to fresh air; administer artificial respiration if required. INGESTION: give water or milk; do NOT induce vomiting. EYES: flush with water for at least 15 min. SKIN: wash with large amounts of water.</p> <p>3.4 TLV-TWA: Not listed. 3.5 TLV-STEL: Not listed. 3.6 TLV-Ceiling: Not listed. 3.7 Toxicity by Ingestion: Currently not available. 3.8 Toxicity by Inhalation: Currently not available. 3.9 Chronic Toxicity: None. 3.10 Vapor (Gas) Irritant Characteristics: Vapors cause severe irritation of eyes and throat and can cause eye and lung injury. They cannot be tolerated even at low concentrations. 3.11 Liquid or Solid Characteristics: Fairly severe skin irritant; may cause pain and second-degree burns after a few minutes contact. 3.12 Odor Threshold: Currently not available. 3.13 IDLH Value: Not listed. 3.14 OSHA PEL-TWA: Not listed. 3.15 OSHA PEL-STEL: Not listed. 3.16 OSHA PEL-Ceiling: Not listed. 3.17 EPA AEGL: Not listed.</p>														

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9.20 SATURATED LIQUID DENSITY		9.21 LIQUID HEAT CAPACITY		9.22 LIQUID THERMAL CONDUCTIVITY		9.23 LIQUID VISCOSITY	
Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F	Temperature (degrees F)	British thermal unit inch per hour-square foot-F	Temperature (degrees F)	Centipoise
35	106.500	55	0.230		N		N
40	106.200	60	0.230		O		O
45	105.799	65	0.230		T		T
50	105.400	70	0.230		P		P
55	105.099	75	0.230		E		E
60	104.700	80	0.230		R		R
65	104.299	85	0.230		T		T
70	104.000	90	0.230		I		I
75	103.599	95	0.230		N		N
80	103.200	100	0.230		E		E
85	102.900	105	0.230		N		N
90	102.500	110	0.230		E		E
95	102.200	115	0.230		N		N
100	101.799	120	0.230		E		E
105	101.400	125	0.230		T		T
110	101.099	130	0.230		I		I
115	100.700	135	0.230		N		N
120	100.299	140	0.230		E		E

9.24 SOLUBILITY IN WATER		9.25 SATURATED VAPOR PRESSURE		9.26 SATURATED VAPOR DENSITY		9.27 IDEAL GAS HEAT CAPACITY	
Temperature (degrees F)	Pounds per 100 pounds of water	Temperature (degrees F)	Pounds per square inch	Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F
R	0	0	0.289	0	0.00790	0	0.129
E	10	10	0.401	10	0.01074	25	0.131
A	20	20	0.550	20	0.01442	50	0.134
C	30	30	0.744	30	0.01911	75	0.136
T	40	40	0.995	40	0.02503	100	0.138
S	50	50	1.315	50	0.03243	125	0.140
	60	60	1.719	60	0.04159	150	0.142
	70	70	2.225	70	0.05282	175	0.143
	80	80	2.853	80	0.06646	200	0.145
	90	90	3.624	90	0.08291	225	0.147
	100	100	4.566	100	0.10260	250	0.148
	110	110	5.705	110	0.12590	275	0.149
	120	120	7.074	120	0.15340	300	0.151
	130	130	8.707	130	0.18570	325	0.152
	140	140	10.640	140	0.22320	350	0.153
	150	150	12.930	150	0.26660	375	0.154
	160	160	15.600	160	0.31650	400	0.155
	170	170	18.710	170	0.37370	425	0.156
	180	180	22.320	180	0.43880	450	0.157
	190	190	26.480	190	0.51260	475	0.157
	200	200	31.260	200	0.59580	500	0.158
	210	210	36.710	210	0.68930	525	0.158
						550	0.159
						575	0.159
						600	0.159