



## MATERIAL SAFETY DATA SHEET (MSDS)

### SECTION 1: Identification

#### 1.1 Product identifiers

**Product Name :** Sulfuryl chloride  
**Cat No.:** AC169450000; AC169450010; AC169450025; AC169450250  
**CAS No. :** 7791-25-5

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Recommended uses :** Laboratory chemicals  
**Uses advised against:** Food, drug, pesticide or biocidal product use.

#### 1.3 Details of the supplier of the safety data sheet

**Company :** Krishna Solvechem Limited.  
B/503, Sahayog, S. V. Road,  
Kandivali (West), Mumbai – 400067. India.

**Telephone :** +91-22-6123 0222

**Email :** exports@kscl.co.in

#### 1.4 Emergency telephone number

**Emergency Phone :** +91-8657457330

### SECTION 2: Hazards identification

#### 2.1 Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute inhalation toxicity – vapors	(Category 2)
Skin Corrosion/Irritation	(Category 1B)
Serious Eye Damage/Eye Irritation	(Category 1)
Specific target organ toxicity (single exposure)	(Category 3)
Target Organs - Respiratory system.	

#### 2.2 Label elements

**Pictogram :**



**Signal word** Danger

**Hazard statement (s)** Causes severe skin burns and eye damage



**Precautionary statement (s)**

**Prevention**

Fatal if inhaled  
May cause respiratory irritation

Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Wear respiratory protection

**Inhalation :**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell

**IF ON SKIN (or hair):**

If skin irritation occurs: Get medical advice/attention  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
Wash contaminated clothing before reuse

**Eyes:**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

**Ingestion:**

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

**Storage:**

Store locked up Store in a well-ventilated place.  
Keep container tightly closed



**Hazards not otherwise classified (HNOC)**

**Disposal:**

Dispose of contents/container to an approved waste disposal plant

Reacts violently with water

**SECTION 3: Composition / information on ingredients**

**3.1**

Component	CAS-No	Weight %
Sulfuryl chloride	7791-25-5	>95

**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

**General Advice:**

If symptoms persist, call a physician.

**If inhalation :**

If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Remove to fresh air. Immediate medical attention is required.

**In case of skin contact :**

Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

**In case of eye contact :**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

**Ingestion :**

Clean mouth with water and drink afterwards plenty of water.

**4.2 Most important symptoms and effects :**

Causes burns by all exposure routes. . Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

**4.3 Notes to Physician :**

Treat symptomatically

**SECTION 5: Firefighting effects**

**5.1 Extinguishing media**

**Suitable extinguishing media :**

Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

**Unsuitable Extinguishing Media: :**

DO NOT USE WATER

**5.2 Flash Point :  
Method :**

No information available  
No information available



<b>Autoignition Temperature:</b>	No information available
<b>Explosion Limits:</b>	
<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Sensitivity to Mechanical Impact</b>	No information available
<b>Sensitivity to Static Discharge</b>	No information available
<b>Specific Hazards Arising from the Chemical :</b>	Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes. Reacts violently with water. Contact with water liberates toxic gas.
<b>Hazardous Combustion Products :</b>	Chlorine. Sulfur oxides

<b>5.4 Protective Equipment and Precautions for Firefighters:</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.			
<b><u>NFPA:</u></b>	<b>Health</b>	<b>Flammability</b>	<b>Instability</b>	<b>Physical hazards</b>
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## SECTION 6: Accidental release measures

<b>6.1 Personal precautions, protective equipment and emergency procedures</b>
Use personal protective equipment as required. Evacuate personnel to safe areas. Ensure adequate ventilation. Keep people away from and upwind of spill/leak.
<b>6.2 Environmental precautions</b>
Should not be released into the environment. See section 12 for additional Ecological Information
<b>6.3 Methods and materials for containment and cleaning up</b>
Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. Do not expose spill to water

## SECTION 7: Handling and storage

<b>7.1 Precautions for safe handling</b>
Use only under a chemical fume hood. Wear personal protective equipment/face protection. Do not breathe mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not ingest. If swallowed then seek immediate medical assistance. Do not allow contact with water.



## 7.2 Conditions for safe storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area. Keep away from water or moist air. Incompatible Materials. Bases. Alcohols. Metals.

## SECTION 8: Exposure controls/personal protection

### 8.1 Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

#### Engineering Measures

Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.

### 8.2 Exposure controls

#### Personal protective equipment -

##### Eye / Face protection

Tight sealing safety goggles. Face protection shield

##### Skin protection and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

##### Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

##### Recommended Filter type

Particulates filter conforming to EN 143. Acid gases filter. Type E. Yellow. conforming to EN14387.

##### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice..

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

a) Appearance	Light yellow Liquid
b) Odour	Pungent
c) Odour Threshold	No information available
d) pH	No information available
e) Melting point / freezing point	-54.1 °C / -65.4 °F
f) Initial boiling point and	69.1 °C / 156.4 °F @ 760 mmHg



<b>boiling range</b>	
<b>g) Flash point</b>	No information available
<b>h) Evaporation rate</b>	No information available
<b>i) Flammability (solid, gas)</b>	Not applicable
<b>j) Upper/lower flammability or explosive limits</b>	No data available No data available
<b>k) Vapour pressure</b>	133 mbar @ 20 °C
<b>l) Vapour density</b>	4.7 (Air = 1.0)
<b>m) Specific Gravity</b>	1.667
<b>n) Solubility</b>	Reacts with water
<b>o) Partition coefficient: n octanol/water</b>	No data available
<b>p) Auto-ignition temperature</b>	No information available
<b>q) Decomposition temperature</b>	No information available
<b>r) Viscosity</b>	0.7 cP at 24 °C
<b>s) Molecular formula</b>	Cl <sub>2</sub> O <sub>2</sub> S
<b>t) Molecular Weight</b>	134.96

### SECTION 10: Stability and Reactivity

<b>10.1 Reactive Hazard :</b>	Yes
<b>10.2 Chemical stability :</b>	Moisture sensitive
<b>10.3 Possibility of hazardous reactions :</b>	None under normal processing. Reacts violently with water. Contact with water liberates toxic gas.
<b>10.4 Conditions to avoid :</b>	Exposure to moist air or water. Excess heat. Exposure to moisture. Incompatible products.
<b>10.5 Incompatible materials:</b>	Bases, Alcohols, Metals
<b>10.6 Hazardous decomposition products :</b>	Chlorine, Sulfur oxides, Thermal decomposition can lead to release of irritating gases and vapors, Hydrogen chloride gas
<b>10.7 Hazardous Polymerization</b>	Hazardous polymerization does not occur



## SECTION 11: Toxicological information

### 11.1

#### Information on toxicological effects

#### Acute toxicity:

**Product Information:** VaporLC50: Category 2

#### **Component Information**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sulfuryl chloride	Not listed	Not listed	159 ppm ( Rat ) 4 h

**Toxicologically Synergistic Products** No information available

#### **Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation :** Causes burns by all exposure routes

**Sensitization:** No information available

**Carcinogenicity :** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Sulfuryl chloride	7791-25-5	Not listed	Not listed	Not listed	Not listed	Not listed

**Mutagenic Effects:** Not mutagenic in AMES Test

**Reproductive Effects:** No information available.

**Developmental Effects :** No information available.

**Teratogenicity:** No information available.

**STOT - single exposure :** Respiratory system

**STOT - repeated exposure:** None known

**Aspiration hazard :** No information available.

**Symptoms / effects, both acute and delayed:** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

**Endocrine Disruptor Information :** No information available

**Other Adverse Effects :** See actual entry in RTECS for complete information



## SECTION 12: Ecological information

### 12.1

#### Ecotoxicity:

Do not empty into drains. Reacts with water so no ecotoxicity data for the substance is available.

**12.2 Persistence and degradability:** Persistence is unlikely based on information Available.

<b>Bioaccumulation/ Accumulation</b>	No information available
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**12.3 Mobility:** Will likely be mobile in the environment due to its volatility.

## SECTION 13: Disposal considerations

**13.1 Waste treatment methods:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## SECTION 14: Transport information

### 14.1 UN number :

DOT : UN1834	TDG : UN1834
IATA : UN1834	IMDG : UN1834

### 14.2 UN proper shipping name

<b>DOT :</b>	SULFURYL CHLORIDE
<b>IMDG :</b>	Sulphuryl chloride
<b>IATA :</b>	sulphuryl chloride, FORBIDDEN FOR IATA TRANSPORT

**14.3 Transport hazard class(es)** DOT: 6.1 TDG: 6.1 IMDG: 6.1 IATA: 6.1

**14.4 Packaging group:** DOT: I TDG: I IMDG: I IATA: I

## SECTION 15: Regulatory information

### 15.1 United states of America Inventory:

Component	CAS-No	TSCA	TSCA Inventory notification Active/Inactive	TSCA - EPA Regulatory Flags
Sulfuryl chloride	7791-25-5	X	ACTIVE	-

**Legend:**





**TSCA - Toxic Substances Control Act, (40 CFR Part 710)**

X - Listed

'-' - Not Listed

**TSCA 12(b) - Notices of Export**                            Not applicable

**International Inventories:**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia(AICS), China (IECSC), Korea (ECL).

Component	CAS-No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Sulfuryl chloride	7791-25-5	X	-	232-245-6	X	X	X	X	X	X

**U.S. Federal Regulations**

**SARA 313**    Not applicable

**SARA 311/312 Hazard Categories**    See section 2 for more information

**CWA (Clean Water Act)**    Not applicable

**Clean Air Act**     Not applicable

**OSHA - Occupational Safety and Health Administration**    Not applicable

**CERCLA**     Not applicable

**California Proposition 65**    This product does not contain any Proposition 65 chemicals.

**15.2 U.S. State Right-to-Know Regulations:**

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Sulfuryl chloride	X	X	X	-	X

**U.S. Department of Transportation**

Reportable Quantity (RQ):        N



DOT Marine Pollutant N  
 DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security** - This product contains the following DHS Chemicals.

Component	DHS Chemical Facility Anti-Terrorism Standard
Sulfuryl chloride	APA

**Other International Regulations**

**Mexico – Grade** No information available

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Sulfuryl chloride	7791-25-5	Listed	Not applicable	Not applicable	Not applicable

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Sulfuryl chloride	7791-25-5	Not applicable	Not applicable	Not applicable	Not applicable

**SECTION 16: Other information**

**16.1 Prepared By:** Regulatory affairs  
 Krishna Solvechem Limited  
**Email:** exports@kscl.co.in  
**Creation Date:** 23-Mar-2012  
**Revision Date:** 19-July-2023  
**Print Date:** 19-July-2023  
**Revision Summary:** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 C F R 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**16.2 Disclaimer:**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.