



MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification

1.1 Product identifiers

Product Name : 3-Chloropropionyl chloride

Cat No.: B25698

CAS No. : 625-36-5

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)

| | |
|------------------------------------|----------------|
| Flammable liquids | (Category 4) |
| Skin Corrosion/Irritation | (Category 1 A) |
| Serious Eye Damage/Eye Irritation | (Category 1) |
| Acute oral toxicity | (Category 4) |
| Acute inhalation toxicity – vapors | (Category 1) |
| Corrosive to metals | (Category 1) |

2.2 Label elements

Pictogram :



Signal word : Danger

Hazard statement (s) : Combustible liquid. Harmful if swallowed



Precautionary statement (s)

Prevention

May be corrosive to metals
Causes severe skin burns
and eye damage
Fatal if inhaled

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

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Keep container tightly closed

Do not eat, drink or smoke when using this product

Keep cool

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

Fire

In case of fire: Use CO₂, dry chemical, or foam for extinction

Ingestion:

Rinse mouth. DO NOT induce vomiting

Storage:

Store locked up Store in a well-ventilated place.

Keep container tightly closed

Store in corrosive resistant polypropylene container with a resistant in liner.



| | |
|--|---|
| Hazards not otherwise classified (HNOC) | Disposal: Dispose of contents/container to an approved waste disposal plant |
| | Corrosive to the respiratory tract |

SECTION 3: Composition / information on ingredients

3.1

| Component | CAS-No | Weight % |
|-------------------------------|----------|----------|
| Propanoyl chloride, 3-chloro- | 625-36-5 | <=100 |

SECTION 4: First aid measures

4.1 Description of first aid measures

| | |
|--|--|
| General Advice: | If symptoms persist, call a physician. |
| If inhalation : | Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur. |
| 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 : | Do NOT induce vomiting. Call a physician or poison control center immediately. |
| 4.2 Most important symptoms and effects : | Causes burns by all exposure routes. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: 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

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|--|---|
| Suitable extinguishing media : | Water spray, carbon dioxide (CO ₂), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers. |
| Unsuitable Extinguishing Media: : | Water |
| 5.2 Flash Point : Method : | 70.5 °C / 158.9 °F No information available |



| | |
|---|--|
| Autoignition Temperature: | 490 °C / 914 °F |
| Explosion Limits: | |
| Upper | 20.20% |
| Lower | 8.80% |
| Sensitivity to Mechanical Impact | No information available |
| Sensitivity to Static Discharge | No information available |
| Specific Hazards Arising from the Chemical : | Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes. Combustible material. Containers may explode when heated. |
| Hazardous Combustion Products : | Carbon monoxide (CO). Carbon dioxide (CO ₂). Hydrogen chloride gas |

| | | | | |
|---|--|---------------------|--------------------|-------------------------|
| 5.4 Protective Equipment and Precautions for Firefighters: | As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. | | | |
| <u>NFPA:</u> | Health | Flammability | Instability | Physical hazards |
| | 4 | 2 | 1 | N/A |

SECTION 6: Accidental release measures

| |
|---|
| 6.1 Personal precautions, protective equipment and emergency procedures |
| Use personal protective equipment as required. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Remove all sources of ignition. Take precautionary measures against static discharges |
| 6.2 Environmental precautions |
| Should not be released into the environment. |
| 6.3 Methods and materials for containment and cleaning up |
| Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. |

SECTION 7: Handling and storage

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| 7.1 Precautions for safe handling |
| Do not get in eyes, on skin, or on clothing. Wear personal protective equipment/face protection. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance. Keep away from open flames, hot surfaces and sources of ignition. |



7.2 Conditions for safe storage

Keep away from heat, sparks and flame. Protect from moisture. Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area. Incompatible Materials. Alcohols. Metals. Strong oxidizing agents. Strong Alkalies.

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 explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

8.2 Exposure controls

Personal protective equipment -

Eye / Face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

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 | Colorless to brown Liquid |
| b) Odour | Acrid |
| c) Odour Threshold | No information available |
| d) pH | < 7 |
| e) Melting point / freezing point | -32 °C / -25.6 °F |
| f) Initial boiling point and | 143 - 145 °C / 289.4 - 293 °F @ 760 mmHg |



| | |
|--|---------------------------------|
| boiling range | |
| g) Flash point | 70.5 °C / 158.9 °F |
| h) Evaporation rate | No information available |
| i) Flammability (solid, gas) | Not applicable |
| j) Upper/lower flammability or explosive limits | Upper : 20.20% Lower : 8.80% |
| k) Vapour pressure | 10 mbar @ 20 °C |
| l) Vapour density | 4.4 |
| m) Specific Gravity | 1.330 |
| n) Solubility | No information available |
| o) Partition coefficient: n octanol/water | No data available |
| p) Auto-ignition temperature | 490 °C / 914 °F |
| q) Decomposition temperature | 30 °C. |
| r) Viscosity | 1.4 mPa s at 20 °C |
| s) Molecular formula | C3 H4 Cl2 O |
| t) Molecular Weight | 126.97 |

SECTION 10: Stability and Reactivity

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|--|--|
| 10.1 Reactive Hazard : | None known, based on information available |
| 10.2 Chemical stability : | Reacts violently with water. Moisture sensitive |
| 10.3 Possibility of hazardous reactions : | None under normal processing. |
| 10.4 Conditions to avoid : | Keep away from open flames, hot surfaces and sources of ignition. Excess heat. Exposure to light. Incompatible products. |
| 10.5 Incompatible materials: | Strong oxidizing agents, Strong bases |
| 10.6 Hazardous decomposition products : | Carbon monoxide (CO), Carbon dioxide (CO ₂), Hydrogen chloride gas |
| 10.7 Hazardous Polymerization | No information available |



SECTION 11: Toxicological information

11.1

Information on toxicological effects

Acute toxicity:

Product Information:

Component Information

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|-------------------------------|---------------------|-------------|---------------------|
| Propanoyl chloride, 3-chloro- | ca 1130 mg/kg (Rat) | Not listed | <0.95 mg/L/1h (Rat) |

Toxicologically Synergistic Products No information available

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

Irritation : No information available
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 |
|-------------------------------|----------|------------|------------|------------|------------|------------|
| Propanoyl chloride, 3-chloro- | 625-36-5 | Not listed | Not listed | Not listed | Not listed | Not listed |

Mutagenic Effects: No information available.

Reproductive Effects: No information available.

Developmental Effects : No information available.

Teratogenicity: No information available.

STOT - single exposure : None known

STOT - repeated exposure: None known

Aspiration hazard : No information available.

Symptoms / effects, both acute and delayed: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: 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 : The toxicological properties have not been fully investigated.



SECTION 12: Ecological information

12.1

Ecotoxicity: Do not empty into drains.

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|-------------------------------|------------------|---|------------|------------|
| Propanoyl chloride, 3-chloro- | Not listed | LC50 (96 h) > 100 - < 215 mg/l (Brachydanio rerio) | Not listed | Not listed |

12.2 Persistence and degradability: Soluble in water Persistence is unlikely based on information Available. Reacts with water

Bioaccumulation/ Accumulation No information available

12.3 Mobility: Will likely be mobile in the environment due to its water solubility.

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: UN3390 IATA : UN3390
IMDG: UN3390

14.2 UN proper shipping name

DOT : TOXIC BY INHALATION LIQUID, CORROSIVE, N.O.S.
IMDG : TOXIC BY INHALATION LIQUID, CORROSIVE, N.O.S.
IATA : TOXIC BY INHALATION LIQUID, CORROSIVE, N.O.S.* FORBIDDEN FOR IATA TRANSPORT

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

14.4 Packaging group: DOT: 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 |
|-------------------------------|----------|------|---|-----------------------------|
| Propanoyl chloride, 3-chloro- | 625-36-5 | 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 |
|-------------------------------|----------|-----|------|-----------|-------|------|------|------|-------|----------|
| Propanoyl chloride, 3-chloro- | 625-36-5 | - | X | 210-890-4 | X | X | X | X | X | KE-05881 |

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:

Not applicable

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 does not contain the any DHS Chemicals.

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) |
|-------------------------------|----------|----------------|------------------------------|---------------------------|--|
| Propanoyl chloride, 3-chloro- | 625-36-5 | Not applicable | 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) |
|-------------------------------|----------|---|--|----------------------------|------------------------------------|
| Propanoyl chloride, 3-chloro- | 625-36-5 | 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-Jan-2023

Print Date: 19-Jan-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.