



SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name	:	Acetyl chloride
REACH No.	:	The exemption from registration, tonnage falling below the registration threshold, or the anticipation of registration at a later deadline applies to this substance or its intended uses.
CAS-No.	:	75-36-5
Index-No.	:	CH-L3-A006

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

Identified uses	:	Laboratory chemicals, Manufacture of substances
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1.3 Details of the supplier of the safety data sheet

Company	VALERIAN LABS HOLDING CORP
Address	1130-1971 BROADWAY STREETPORT COQUITLAM, BC V3C 0C9 CANADA
Telephone	+1 (604)-710-0869
E-mail:	info@valerianlabs.com

1.4 Emergency telephone

Number:	1-888-226-8832 CANUTEC (CANADA) 1-800-424-9300 CHEMTREC (USA)
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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

In accordance with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

Flammable liquids (Category 2), H225
Skin corrosion (Sub-category 1B), H314
Serious eye damage (Category 1), H318





Safety Data Sheet

Version: 1.2

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Retrieve on: SEPT-10-2023

2.2 Label elements

Labelling In accordance with GHS Standards

Pictogram



Signal Word

Danger

Hazard statement(s)

H225

Highly flammable liquid and vapor.

H314

Causes severe skin burns and eye damage.

Precautionary statement(s)

P210

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233

Keep container tightly closed.

P240

Ground and bond container and receiving equipment.

P280

Wear protective gloves/ protective clothing/ eye protection/ face protection.

P303 + P361 + P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard information (EU)

EUH014

Reacts violently with water.

Reduced Labeling (<= 125 ml)

Pictogram



Signal Word

Danger

Hazard statement(s)

H314

Causes severe skin burns and eye damage.

Precautionary statement(s)

P280

Wear protective gloves/ protective clothing/ eye protection/ face protection.

P303 + P361 + P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard information (EU)

EUH014

Reacts violently with water.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Lachrymator.





SECTION 3: Composition/information on ingredients

3.1 Substances

Formula	: C ₂ H ₃ ClO
Molecular weight	: 78,50 g/mol
CAS-No.	: 75-36-5
EC-No.	: 200-865-6
Index-No.	: CH-L3-A006

Component	Classification	Concentration
Acetyl chloride		
CAS-No.	75-36-5	Flam. Liq. 2; Skin Corr. 1B; Eye Dam. 1; H225, H314, H318
EC-No.	200-865-6	
Index-No.	CH-L3-A006	
		<= 100 %

SECTION 4: First aid measures

4.1 Description of First-Aid Measures:

- General advice: First-aid responders must prioritize their own safety. Provide the attending doctor with this material safety data sheet.
- If inhaled: Move the affected person to fresh air and promptly seek medical attention.
- In case of skin contact: Immediately remove all contaminated clothing. Rinse the affected skin with water or take a shower. Contact a physician immediately.
- In case of eye contact: Rinse the eyes thoroughly with an ample amount of water. Immediately consult an ophthalmologist and remove contact lenses.
- If swallowed: Have the victim drink water (up to two glasses at most) and discourage vomiting (due to the risk of perforation). Seek immediate medical attention. Do not attempt to neutralize.

4.2 Most Important Symptoms and Effects:

- The most significant known symptoms and effects are provided in the product labeling (refer to section 2.2) and/or section 11.

4.3 Indication of Immediate Medical Attention and Special Treatment:

- No specific data is available regarding the need for immediate medical attention or special treatment

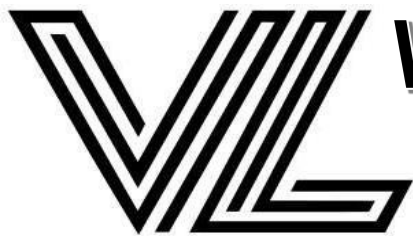
SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂) Dry powder





Unsuitable extinguishing media

Foam Water

5.2 Special hazards arising from the substance or mixture

Carbon oxides

Hydrogen chloride gas

Flash back possible over considerable distance.

Combustible.

Pay attention to flashback.

Vapors are heavier than air and may spread along floors.

May not get in touch with: Water

Development of hazardous combustion gases or vapours possible in the event of fire.

Forms explosive mixtures with air at ambient temperatures.

5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Water hydrolyzes material liberating acidic gas which in contact with metal surfaces can generate flammable and/or explosive hydrogen gas. Remove container from danger zone and cool with water. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal Precautions, Protective Equipment, and Emergency Procedures:

- Advice for non-emergency personnel: Avoid inhaling vapors and aerosols, and prevent direct contact with the substance. Ensure there is sufficient ventilation, and keep a safe distance from heat sources and potential ignition points.
- In case of an emergency, evacuate the affected area, follow emergency protocols, and seek guidance from an expert. Refer to Section 8 for information on personal protective equipment.

6.2 Environmental Precautions:

- Prevent the product from entering drainage systems, as there is a risk of explosion.

6.3 Methods and Materials for Containment and Cleanup:

- Cover drains to prevent product entry. Collect, secure, and pump off any spills. Comply with any potential material restrictions (see sections 7 and 10). Use absorbent materials suitable for liquids to clean up. Dispose of waste properly and clean the affected area.

6.4 Reference to Other Sections:

- For disposal instructions, please refer to Section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Keep workplace dry. Do not allow product to come into contact with water.

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.





Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.

Keep away from water. Never allow product to get in contact with water during storage.

Hydrolyzes readily. Handle and store under inert gas.

Storage class

Storage class (TRGS 510): 3: Flammable liquids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters

8.2 Exposure controls

Personal protective equipment

Eye/Face Protection:

Use eye protection equipment that has been tested and approved in accordance with relevant government standards, such as NIOSH (US) or EN 166 (EU). Wear tightly fitting safety goggles.

Skin Protection:

This recommendation specifically pertains to the product specified in the safety data sheet provided by us and for its intended use. When dissolving or mixing with other substances or used under conditions that deviate from those specified in EN374, please take appropriate precautions.

Body Protection:

Wear flame-retardant antistatic protective clothing.

Respiratory Protection:

Use Filter A (according to DIN 3181) for protection against vapors of organic compounds. The entrepreneur must ensure that respiratory protective devices are properly maintained, cleaned, and tested in accordance with the manufacturer's instructions. Document these measures adequately.

Control of Environmental Exposure:

Prevent the product from entering drainage systems, as there is a risk of explosion.





SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- | | |
|---|--|
| a) Physical state | liquid, clear |
| b) Color | colorless |
| c) Odor | stinging |
| d) Melting point/freezing point | Melting point/range: 112 °C lit. |
| e) Initial boiling point and boiling range | 52 °C lit. |
| f) Flammability (solid, gas) | No data available |
| g) Upper/lower flammability or explosive limits | Upper explosion limit: 19 %(V)
Lower explosion limit: 7,3 %(V) |
| h) Flash point | 5 °C - closed cup - - |
| i) Autoignition temperature | No data available
- |
| j) Decomposition temperature | No data available |
| k) pH | No data available |
| l) Viscosity | Viscosity, kinematic: No data available
Viscosity, dynamic: No data available |
| m) Water solubility | No data available |
| n) Partition coefficient: n-octanol/water | No data available |
| o) Vapor pressure | 805,764 hPa at 20 °C |
| p) Density | 1,104 g/cm ³ at 25 °C - lit. |
| Relative density | No data available |
| q) Relative vapor density | No data available |
| r) Particle characteristics | No data available |





9.2 Other safety information

Relative vapor density 2,70

SECTION 10: Stability and reactivity

10.1 Reactivity

Vapors may form explosive mixture with air.
Reacts violently with water.

10.2 Chemical stability

sensitive to moisture

10.3 Possibility of hazardous reactions

Exothermic reaction with:

- Alkaline earth metalsAlcohols
- Alkali metals
- Strong oxidizing agentsalkalines
- nonmetallic halides

A risk of explosion and/or of toxic gas formation exists with the following substances:

- Water
- Dimethyl
- Sulfoxide
- Potassium
- sodium
- amides

10.4 Conditions to avoid

Warming.
Moisture.

10.5 Incompatible materials

Metals

10.6 Hazardous decomposition products

In the event of fire: see section 5





SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Oral: No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Skin - Rabbit

Result: Causes burns.

Remarks: (IUCLID)

Serious eye damage/eye irritation

Remarks: No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

11.2 Additional Information

Endocrine disrupting properties

Product:

Assessment

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

- Burning sensation, cough, wheezing, and laryngitis are common symptoms associated with exposure.
- Shortness of breath may occur due to respiratory distress.
- Spasm, inflammation, and edema of the larynx and bronchi can lead to severe breathing difficulties.
- Pneumonitis and pulmonary edema may result from exposure.
- The material is highly destructive to the tissues of mucous membranes, the upper respiratory tract, eyes, and skin.
- It is essential to note that, to the best of our knowledge, comprehensive investigations into the chemical, physical, and toxicological properties of this substance have not been conducted.





SECTION 12: Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

Product:

Assessment

: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

No data available

SECTION 14: Transport information

14.1 UN number

ADR/RID: 1717

IMDG: 1717

IATA: 1717

14.2 UN proper shipping name

ADR/RID: ACETYL CHLORIDE

IMDG: ACETYL CHLORIDE

IATA: Acetyl chloride

14.3 Transport hazard class(es)

ADR/RID: 3 (8)

IMDG: 3 (8)

IATA: 3 (8)

14.4 Packaging group

ADR/RID: II

IMDG: II

IATA: II





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14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

14.6 Special precautions for user

Tunnel restriction code : (D/E)

Further information : No data available

SECTION 15: Regulatory information

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

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

National legislation

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

O1

OTHER HAZARDS

P5c

FLAMMABLE LIQUIDS

Other regulations

Take note of Dir 94/33/EC on the protection of young people at work.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Full text of other abbreviations

These are abbreviations and acronyms commonly used in the field of chemical safety, regulation, and transportation:

1. ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
2. ADR - Agreement concerning the International Carriage of Dangerous Goods by Road
3. AIIC - Australian Inventory of Industrial Chemicals
4. ASTM - American Society for the Testing of Materials
5. bw - Body weight
6. CMR - Carcinogen, Mutagen, or Reproductive Toxicant
7. DIN - Standard of the German Institute for Standardization
8. DSL - Domestic Substances List (Canada)
9. ECx - Concentration associated with x% response
10. ELx - Loading rate associated with x% response





11. EmS - Emergency Schedule
12. ENCS - Existing and New Chemical Substances (Japan)
13. ErCx - Concentration associated with x% growth rate response
14. GHS - Globally Harmonized System
15. GLP - Good Laboratory Practice
16. IARC - International Agency for Research on Cancer
17. IATA - International Air Transport Association
18. IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
19. IC50 - Half maximal inhibitory concentration
20. ICAO - International Civil Aviation Organization
21. IECSC - Inventory of Existing Chemical Substances in China
22. IMDG - International Maritime Dangerous Goods
23. IMO - International Maritime Organization
24. ISHL - Industrial Safety and Health Law (Japan)
25. ISO - International Organization for Standardization
26. KECI - Korea Existing Chemicals Inventory
27. LC50 - Lethal Concentration to 50% of a test population
28. LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)
29. MARPOL - International Convention for the Prevention of Pollution from Ships
30. n.o.s. - Not Otherwise Specified
31. NO(A)EC - No Observed (Adverse) Effect Concentration
32. NO(A)EL - No Observed (Adverse) Effect Level
33. NOELR - No Observable Effect Loading Rate
34. NZIoC - New Zealand Inventory of Chemicals
35. OECD - Organization for Economic Co-operation and Development
36. OPPTS - Office of Chemical Safety and Pollution Prevention
37. PBT - Persistent, Bio accumulative, and Toxic substance
38. PICCS - Philippines Inventory of Chemicals and Chemical Substances
39. (Q)SAR - (Quantitative) Structure Activity Relationship
40. REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization, and Restriction of Chemicals
41. RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
42. SADT - Self-Accelerating Decomposition Temperature
43. SDS - Safety Data Sheet
44. TCSI - Taiwan Chemical Substance Inventory
45. TECI - Thailand Existing Chemicals Inventory
46. TSCA - Toxic Substances Control Act (United States)
47. UN - United Nations
48. UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods
49. vPvB - Very Persistent and Very Bio accumulative

Additional information

The provided information is considered accurate but is not intended to cover every aspect and should be regarded as a general reference. The content in this document is derived from our current understanding and is relevant to the product concerning the necessary safety measures.

