

Pentanoyl-d₉ chloride

Section 1. Chemical product and company identifications

Product code: D-8255

Chemical formula: C₅D₉ClO

CAS: 148587-09-1

CAS (unlabelled): 638-29-9

Synonyms: Valeryl chloride, Valeroyl chloride

Supplier / Manufacturer:

C/D/N Isotopes Inc.

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In case of emergency:

TOXYSKAN HOTLINE: 1-855-780-0599

Section 2. Hazards identifications

GHS (Globally Harmonized System of Classification and Labelling of Chemicals):

- GHS Classification:**
- Flammable liquids (Category 3)
 - Acute toxicity, Inhalation (Category 3)
 - Skin corrosion (Category 1A)
 - Serious eye damage (Category 1)

GHS Label elements:

- Pictograms:



- Signal word: Danger

- Hazards statement:**
- H226 Flammable liquid and vapor
 - H314 Causes severe skin burns and eye damage
 - H318 Causes serious eye damage
 - H331 Toxic if inhaled

- Precautionary statement:**
- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 - P233 Keep container tightly closed.
 - P240 Ground/bond container and receiving equipment.
 - P241 Use explosion-proof electrical/ ventilating/ lighting equipment.
 - P242 Use non-sparking tools.
 - P243 Take action to prevent static discharges.
 - P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
 - P264 Wash hands thoroughly after handling.
 - P271 Use only outdoors or in a well-ventilated area.
 - P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 - P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
 - P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water

- P304 + P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.
- P305 +P351 +P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310 Immediately call a POISON CENTER or doctor/physician.
- P363 Wash contaminated clothing before reuse.
- P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
- P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
- P405 Store locked up
- P501 Dispose of contents/ container to an approved waste disposal plant.

Section 3. Composition and information on ingredients

<u>Name</u>	<u>CAS</u>	<u>Concentration %</u>
Pentanoyl-d ₉ chloride	148587-09-1	> 98

Section 4. First aid measures

Eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin contact: Wash off with soap and plenty of water. Consult a physician.

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Indication of immediate medical attention and special treatment needed, if necessary: No data available.

Most important symptoms and effects, both acute and delayed: No data available.

Section 5. Firefighting measures

Flammability of the product: Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.

Products of combustion: Hazardous decomposition products formed under fire conditions: Carbon oxides, hydrogen chloride gas.

Firefighting media and instructions: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

Section 6. Accidental release measures

Personal precautions: Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition.

Environmental precautions: Do not let product enter drains. Discharge into the environment must be avoided.

Methods for cleaning up: Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

Section 7. Handling and storage

Handling: Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Provide appropriate exhaust ventilation. Keep away from sources of ignition - No smoking.

Storage: Store at room temperature. Adequate ventilation.

Section 8. Exposure Controls, Personal Protections

Engineering controls: Use mechanical exhaust or laboratory fumehood to avoid exposure.

Eyes: Safety glasses with side-shields conforming to NIOSH (US) or EN 166 (EU).

Respiratory: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hands: Handle with gloves. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Skin/body: Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Section 9. Physical and chemical properties (unlabelled)

Molecular weight: 120.58 g/mol
Physical status: Liquid
Color: Colorless to light yellow
Odour: No data available
Density: 1.016 g/cm³
Melting point: -110 °C (-166 °F)
Boiling point: 125 -127 °C (257 – 261 °F)
Vapour pressure: 15.7 hPa (11.8 mmHg) at 25 °C (77 °F)
Vapour density: 4.16 (Air = 1)
Partition coefficient (octanol/water): No data available
Water solubility: Decomposes
Lower explosion limit: No data available.
Upper explosion limit: No data available.
Auto-ignition temperature: 265 °C (509 °F)
Flash point: 32 °C (90 °F)

Section 10. Stability and reactivity

Stability and reactivity: Stable under recommended storage conditions.
Incompatibility: Strong oxidizing agents, water, alcohols and strong bases
Products of combustion: Hazardous decomposition products formed under fire conditions: Carbon oxides, hydrogen chloride gas.
Reactivity conditions: No data available.

Section 11. Toxicological information (unlabelled)

Toxicological data: Pentanoyl chloride

Information on ingredients:

<u>Name</u>	<u>CAS</u>	<u>LD₅₀</u>	<u>LC₅₀</u>
Pentanoyl chloride	638-29-9	No data available	Inhalation - Rat – 4 h - 2,070 mg/m ³

Potential acute effects

- **Eyes:** Causes severe eye damage.
- **Skin:** Causes severe skin burns.
- **Inhalation:** Toxic if inhaled.
- **Ingestion:** No data available.

Potential chronic effects

- **Carcinogenic effects:** IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- **Mutagenic effects:** No data available.
- **Teratogenic effects:** No data available
- **Medical conditions aggravated by overexposure:** No data available.

Section 12. Ecological information

Ecological data: No data available

<u>Name</u>	<u>Results</u>	<u>Species</u>	<u>Period</u>
Pentanoyl chloride	68 mg/L LC50	Leuciscus idus (Golden orfe)	96 h

Effects on environment: No data available.
Mobility: No data available.
Environmental precautions: No data available.
Persistence and degradability: No data available.
Bioaccumulative potential: No data available.

Section 13. Disposal considerations

Waste disposal: Contact a licensed professional waste disposal service to dispose of this material.

Section 14. Transportation information

Classification DOT/IMDG/IATA label:

Shipping name: Valeryl Chloride

UN number: UN 2502

Class: 8 (3)

Packaging group: II

Additional information: None

Section 15. Regulatory information

UNITED STATES: NFPA classification



Health: 3
Flammable: 3
Reactivity: 0
Special conditions: None

Legend: 4: Severe, 3: High, 2: Moderate, 1: Slightly, 0: Not hazardous

U.S. Federal regulations:

California proposition 65 requirements : Not listed

SARA section 313 (specific toxic chemical listings) : Not listed

CERCLA reportable quantity : Not listed

Sections 302-304 reportable quantity : Not listed

Community Right-to-Know (Sections 311 and 312) : Not Listed

Section 16. Additional information

Date of issue: November 1, 2022

Version: 1

Elaborated by: Toxyscan Inc., 1-866-780-0599

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This safety data sheet has been prepared in accordance with the OSHA (USA), WHMIS (Canada) / GHS classification rules in effect at the time of writing.