

Material Safety Data Sheet

N-VALERYL CHLORIDE

Section 1 - Product and Company Information

Substance	: n-butanecarbonylchloride; n-VALEROYL CHLORIDE; n-PENTANOYL CHLORIDE; PENTANOYL CHLORIDE;
Trade Name	: Valeryl Chloride
Chemical family	: Acid Chloride
Company	: Shiva Pharmachem Ltd. Plot No. 588, Village Luna – 391440 Taluka Padra, District: Vadodara, Gujarat, India.
Phone No.	: +91 2662-221021 / 224360
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Section 2 – Hazards Identification

2.1 Classification of the substances or mixture

Classification according to regulations (EC) no 1272 / 2008 (EU GHS/CLP)

Flammable liquid (Category 2), Skin Corrosion, (Category 1B),
Acute toxicity, inhalation, (category 2), Acute toxicity, oral, (category 4)

Classification according to EU directives 67/548/EEC or 1999/45/EC

Highly Flammable. Reacts violently with water. Harmful if swallowed. Causes burn. Very toxic by inhalation

2.2 Labeling elements

Labeling according to EC 1272 / 2008 (CLP)

Pictogram



Single word

Danger

Hazard Elements

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H314	Causes severe skin burn and eye damage

Precautionary statements

P210	Keep away from heat/spark/open flame/hot surface - No smoking.
P260	Do not breath dust/fume/gas/mist/vapors/spray.
P280	Wear protective gloves/protective clothing/eye and face protection
P284	Wear respiratory protection
P305 + P351 + P338	IF IN EYES: Rinse cautiously for several minutes.
P310	Immediately call physician

According to EU directives 67/548/EEC as amended

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Hazard symbol(s)



R PHRASE (s)

R10

Flammable.

R14

Reacts violently with water.

R22

Harmful if swallowed.

R26

Very toxic by inhalation.

R35

Causes severe burn.

S PHRASE (s)

S16

Keep away from source of ignition – No smoking

S26

In case of contact with eyes rinse immediately with plenty of water and seek medical advice.

S36/37/39

Wear suitable protective clothing, gloves and eye/face protection.

S45In case of accident or you feel unwell, seek medical advice.
(Show the label where possible)

2.3 Other hazard

Lachrymator.

Section 3 – Composition / Information on Ingredients

Product Name	CAS No.	EC NO.	Mol. Formula	Mol. Weight
Valeryl Chloride	638-29-9	211-330-1	C ₅ H ₉ ClO	120.58 g/mol

Section 4 – First Aid Measures

INHALATION

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

SKIN CONTACT

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

EYE CONTACT

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately. Do not induce vomiting.

Section 5 – Fire Fighting Measures

CONDITIONS OF FLAMMABILITY

Water hydrolyzes material liberating acidic gas which in contact with metal surfaces can generate flammable and/or explosive hydrogen gas.

EXTINGUISHING MEDIA

Suitable: Carbon dioxide, dry chemical powder.

Unsuitable: Do not use water.

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SPECIAL RISKS

Specific Hazard(s): Flammable liquid. Vapor may travel considerable distance to source of ignition and flash back. Emits toxic fumes under fire conditions.

Explosion Hazards: Vapor may travel considerable distance to source of ignition and flash back. Container explosion may occur under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

NFPA Rating: (estimated) Health: 3; Flammability: 3; Instability: 0

Section 6 – Accidental Release Measures

PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area. Shut off all sources of ignition. Use Non-sparking tools.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP

Cover with dry-lime, sand, or soda ash. Place in covered containers using non-sparking tools and transport outdoors. Ventilate area and wash spill site after material pickup is Complete.

Section 7 - Handling and Storage

HANDLING

Directions for Safe Handling: Do not breathe vapor. Do not allow to get in eyes, on skin and on Clothing. Avoid prolonged or repeated exposure.

STORAGE

Conditions of Storage: Keep tightly closed. Keep away from heat, sparks, and open flame.

Special Requirements: Readily Hydrolyzed.

Section 8 - Exposure Controls / Personal Protection

ENGINEERING CONTROLS

Safety shower and eye bath. Use nonsparking tools. Use only in a chemical fume hood.

GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Wash thoroughly after handling. Discard contaminated shoes.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

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Hand Protection: Compatible chemical-resistant gloves.

Eye Protection: Chemical safety goggles.

Special Protective Measures: Face shield (8-inch minimum).

Section 9 - Physical and Chemical Properties

Appearance Color	: Colorless
Form	: Clear liquid
pH	: Acidic
BP/BP Range	: 126.0 - 129.0 °C
MP/MP Range	: Data not available.
Flash Point	: 32 °C Method: closed cup
Flammability	: Flammable
Vapor Pressure	: 8.6 mmHg at 20 °C
SG/Density	: 0.995 g/cm ³ at 20°C
Solvent Content	: Nil
Water Content	: Not applicable, reacts with water
Solubility	: Miscible with most aromatic hydrocarbons.

Section 10 - Stability and Reactivity

STABILITY:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Do not allow water to enter container because of violent reaction.

Materials to Avoid:

Water, Alcohols, Oxidizing agents, Strong bases.

HAZARDOUS DECOMPOSITION PRODUCTS

Carbon monoxide, Carbon dioxide, Hydrogen chloride gas.

HAZARDOUS POLYMERIZATION:

Will not occur

Section 11 - Toxicological Information

ACUTE TOXICITY

LD50

Inhalation

Rat

2,070 mg/m³

IRRITATION DATA

Skin

Rabbit

Remarks: Corrosive

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SIGNS AND SYMPTOMS OF EXPOSURE

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Inhalation may result in spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis, and pulmonary edema. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, nausea, and vomiting.

ROUTE OF EXPOSURE

Multiple Routes: Harmful if swallowed, inhaled or absorbed through Skin, Causes burns.

Target Organ Information

Lungs, Eyes, Skin

Section 12 - Ecological Information

Elimination

Classification: Substantially biodegradable.

ECOTOXICOLOGICAL EFFECTS

Test Type : LC50 Fish
Species : Leuciscus idus
Time : 96 h
Value : 46.0 – 100.0 mg/l

Section 13 - Disposal Considerations

SUBSTANCE DISPOSAL

Contact a licensed professional waste disposal service to dispose of this material. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

RID/ADR

UN No. : 2502
Hazard Class : 8
Packing Group : II
Sub Risk : 3
Proper Shipping Name : Veleroyl chloride

IMDG

UN No. : 2502
Hazard Class : 8
Packing Group : II
Subrisk : 3
Proper Shipping Name : N-VALERYL CHLORIDE
Marine Pollutant : No
Severe Marine Pollutant : No

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IATA

UN No.	: 2502
Hazard Class	: 8
Packing Group	: II
Subrisk	: 3
Proper Shipping Name	: Veleroyl chloride
Inhalation Packing Group I	: No

Section 15 - Regulatory Information

CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

INDICATION OF DANGER : C

Corrosive

Section 16 - Additional Information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Shiva Pharmachem Ltd. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Shiva Pharmachem Ltd has been advised of the possibility of such damages.