



MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification

1.1 Product identifiers

Product Name : Valeryl chloride
Cat No.: AC169120000; AC169120010; AC169121000
CAS No. : 638-29-9

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 3)
Acute Inhalation Toxicity - Vapors	(Category 3)
Skin Corrosion/Irritation	(Category 1 B)
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)

Flammable liquid and vapor
May cause respiratory irritation



Precautionary statement (s)

Prevention

Causes severe skin burns and eye damage
Toxic if inhaled

Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting/equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Use only outdoors or in a well-ventilated area
Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection

RESPONSE:

Call a POISON CENTER or doctor/physician if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

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 ON SKIN (or hair):

Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse Immediately call a POISON CENTER or doctor/physician

Ingestion

IF SWALLOWED: Rinse mouth.
DO NOT induce vomiting

Fire

Fight fire with normal precautions from a reasonable distance

Storage:

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



Disposal:

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Contact with water liberates toxic gas

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SECTION 3: Composition / information on ingredients

Component	CAS-No	Weight %
Valeryl chloride by GC %	638-29-9	>99.0%

SECTION 4: First aid measures

4.1 Description of first aid measures

If inhalation :

Remove to fresh air. Immediate medical attention is required. 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. If not breathing, give artificial respiration.

In case of skin contact :

Immediate medical attention is required. Wash off immediately with plenty of water for at least 15 minutes.

In case of eye contact :

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

Ingestion :

Do NOT induce vomiting. Call a physician or poison control center immediately.

4.2 Most important symptoms and effects :

Difficulty in breathing. 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: Firefight effects

5.1 Extinguishing media

Suitable extinguishing media :

Carbon dioxide (CO₂). Dry chemical. Chemical foam. CO₂, dry chemical, dry sand, alcohol-resistant foam. Water mist may be



	used to cool closed containers.								
Unsuitable Extinguishing Media: :	DO NOT USE WATER								
5.2 Flash Point :	32 °C / 89.6 °F								
Method :	No information available								
Autoignition Temperature:	265 °C / 509 °F								
Explosion Limits:									
Upper	No data available								
Lower	No data available								
Sensitivity to Mechanical Impact	No information available								
Sensitivity to Static Discharge	No information available								
Specific Hazards Arising from the Chemical :	Flammable. Contact with water liberates toxic gas. Water reactive. Contact with water liberates toxic gas. Risk of ignition. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Corrosive material. Causes burns by all exposure routes.								
Hazardous Combustion Products :	Carbon monoxide (CO). Carbon dioxide (CO ₂). Phosgene. 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>	<table border="1"> <thead> <tr> <th>Health</th> <th>Flammability</th> <th>Instability</th> <th>Physical hazards</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>2</td> <td>0</td> <td>W</td> </tr> </tbody> </table>	Health	Flammability	Instability	Physical hazards	3	2	0	W
Health	Flammability	Instability	Physical hazards						
3	2	0	W						
SECTION 6: Accidental release measures									
6.1 Personal precautions, protective equipment and emergency procedures	Remove all sources of ignition. Take precautionary measures against static discharges. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Do not get in eyes, on skin, or on clothing. Use personal protective equipment as required.								
6.2 Environmental precautions	See Section 12 for additional Ecological Information.								
6.3 Methods and materials for containment and cleaning up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Wear self-contained breathing								



apparatus and protective suit. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Do not expose spill to water. Do not let this chemical enter the environment. Take precautionary measures against static discharges. Soak up with inert absorbent material.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Do not breathe mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Handle product only in closed system or provide appropriate exhaust ventilation. Handle under inert gas, protect from moisture. Use spark-proof tools and explosion-proof equipment. Use only non-sparking tools. Do not allow contact with water. Do not allow contact with water because of violent reaction. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use only under a chemical fume hood. Do not breathe (dust, vapor, mist, gas). Do not ingest. If swallowed then seek immediate medical assistance. Wear personal protective equipment/face protection.

7.2 Conditions for safe storage

Keep in a dry, cool and well-ventilated place. Refer product specification and/or product label for specific storage temperature requirement. Keep container tightly closed. Keep away from heat, sparks and flame. Protect from moisture. Flammables area. Store under an inert atmosphere. Keep away from water or moist air. Protect from moisture. Keep away from open flames, hot surfaces and sources of ignition. Corrosives area. Keep containers tightly closed in a dry, cool and well-ventilated place.

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. Use only under a chemical fume hood. 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

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, Form: Liquid
b) Odour	pungent
c) Odour Threshold	No information available
d) pH	No information available
e) Melting point / freezing point	-110 °C / -166 °F
f) Initial boiling point and boiling range	125 - 127 °C / 257 - 260.6 °F @ 760 mmHg
g) Flash point	32 °C / 89.6 °F
h) Evaporation rate	No information available
i) Flammability (solid, gas)	Not applicable
j) Upper/lower flammability or explosive limits	No data available
k) Vapour pressure	11.4 mbar @ 20 °C
l) Vapour density	4.16
m) Specific Gravity	0.990
n) Solubility	No information available
o) Partition coefficient: n octanol/water	No data available
p) Auto-ignition temperature	265 °C / 509 °F
q) Decomposition temperature	No information available
r) Viscosity	No information available



s) Molecular formula	C5 H9 Cl O
t) Molecular Weight	120.58

SECTION 10: Stability and Reactivity

10.1 Reactive Hazard :	Yes
10.2 Chemical stability :	Moisture sensitive. Contact with water liberates toxic gas.
10.3 Possibility of hazardous reactions :	Contact with water liberates toxic gas.
10.4 Conditions to avoid :	Keep away from open flames, hot surfaces and sources of ignition. Incompatible products. Exposure to moist air or water. Heat, flames and sparks.
10.5 Incompatible materials:	Water, Strong oxidizing agents, Strong bases, Alcohols, Amines
10.6 Hazardous decomposition products :	Carbon monoxide (CO), Carbon dioxide (CO ₂), Phosgene, Hydrogen chloride gas
10.7 Hazardous Polymerization	Hazardous polymerization does not occur.

SECTION 11: Toxicological information

11.1 Acute Toxicity

Product Information
Vapor LC50 Category 3. ATE = 2 - 10 mg/l.
Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Valeryl chloride	Not listed	Not listed	2.07 mg/L/54h (Rat)

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 as a any ingredient as a Carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Valeryl chloride	638-29-9	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:	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

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Valeryl chloride	Not listed	Leuciscus idus: 46-100 mg/L 96h	Not listed	Not listed

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

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 :	ADR/RID: 2502 IMDG: 2502 IATA: 2502		
14.2 UN proper shipping name			
ADR/RID :	VALERYL CHLORIDE		
IMDG :	VALERYL CHLORIDE		
IATA :	VALERYL CHLORIDE		
14.3 Transport hazard class(es)	ADR/RID: 8	IMDG: 8	IATA: 8
Subsidiary Hazard Class	ADR/RID: 3	IMDG: 3	IATA: 3
14.4 Packaging group:	ADR/RID: II	IMDG: II	IATA: II

SECTION 15: Regulatory information

15.1 United states of America Inventory:

Component	CAS-No	TSCA	TSCA Inventory notification Active/Inactive	TSCA - EPA Regulatory Flags
Valeryl chloride	638-29-9	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), Australia (AICS), China (IECSC), Korea (ECL).

Component	CAS-No	DSL	NDSL	EINECS	PICCS	ENCS	AICS	IECSC	KECL
Valeryl chloride	638-29-9	x	-	211-330-1	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



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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
Valeryl chloride	-	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 does not contains the following DHS chemicals:

Other International Regulations

Mexico – Grade No information available

SECTION 16: Other information

16.1 Prepared By:	Regulatory Affairs
	Krishna Solvechem Ltd
Email:	atul@kscl.co.in
Creation Date:	10-Nov-2010
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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	CFR 1910.1200 to align with the Globally Harmonized
System of	Classification and Labeling of Chemicals (GHS).



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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 a 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.