

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification

1.1 Product identifiers

Product Name : Isovaleryl chloride

Cat No.: AC169280000; AC169280250; AC169281000; AC169285000

CAS No.: 108-12-3

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 Ltd.

B/503, Shayog, S. V. Road,

Kandivali (West), Mumbai – 400067. India.

Telephone: +91-22-6123 0222

Email: atul@kscl.co.in

1.4 Emergency telephone number

Emergency Phone: +91-22-6123 0222 (10.00am - 7.00pm) [Office hours]

SECTION 2: Hazards identification

2.1 Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/Irritation	(Category 1 B)
Serious Eye Damage/Eye Irritation	(Category 1)
Flammable liquids	(Category 3),
Corrosive to metals	(Category 1)
Acute Inhalation Toxicity - Dusts and Mists	(Category 3)

2.2 Label elements

Pictogram:







Signal word Danger

Hazard statement (s) Flammable liquid and vapor

May be corrosive to metals

Causes severe skin burns and eye damage

Toxic if inhaled



Precautionary statement (s)

Prevention

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

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 Keep only in original container

RESPONSE:

Immediately call a POISON CENTER or doctor/physician

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

IF INHALED:

Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF ON SKIN (or hair):

Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse

Ingestion

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Storage:

Store in a well-ventilated place. Keep container tightly closed Store locked up Store in corrosive resistant polypropylene container with a resistant inliner

Disposal:

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Non identified

Other hazards Stench



SECTION 3: Composition / information on ingredients

3.1

Component	CAS-No	Weight %
Butanoyl chloride, 3-methyl-	108-123	>95

	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 o 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 immediate with plenty of water for at least 15 minutes.						
	In case of eye contact: Immediate medical attention is required. Rinse immediate with plenty of water, also under the eyelids, for at least 15 minutes.						
	Ingestion :	Do NOT induce vomiting. Call a physician 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: Firefigh effects

5.1 **Extinguishing media**

Suitable extinguishing media Carbon dioxide (CO 2). Dry chemical. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Chemical foam. Water mist may be used to cool closed containers.

No information available

Unsuitable Extinguishing

Media::

Flash Point: 27 °C / 80 °F 5.2



No information available Method: No information available

Autoignition Temperature:

Explosion Limits: No information available Upper

No data available Lower

Sensitivity to Mechanical

Impact

Sensitivity to Static

from the Chemical:

Discharge

No information available

No information available

Flammable. Containers may explode when heated. Vapors may **Specific Hazards Arising** form explosive mixtures with air. Vapors may travel to source of

ignition and flash back.

Carbon monoxide (CO). Carbon dioxide (CO2). Phosgene.

Hazardous Combustion

Products:

Hydrogen chloride gas.

5.4 As in any fire, wear self-contained breathing apparatus **Protective Equipment and**

Precautions for Firefighters: pressure-demand, MSHA/NIOSH (approved or equivalent) and

full protective gear.

NFPA: Health **Flammability** Instability Physical hazards 3 2 0 N/A

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.

6.2 **Environmental precautions**

See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up 6.3

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure adequate ventilation. Wear personal protective equipment/face protection. 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. Use spark-proof tools and explosionproof equipment. Use only non-sparking tools. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges.



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. Flammables area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Store under an inert atmosphere. Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area. Keep away from heat, sparks and flame.

SECTION 8: Exposure controls/personal protection

8.1 Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limitsestablished by the region specific regulatory bodies.

Engineering Measures

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

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

Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

Hygiene Measures

e) Melting point / freezing

Handle in accordance with good industrial hygiene and safety practice.

9.1 Information on basic physical and chemical properties a) Appearance Light Yellow, Form: Liquid b) Odour Stench c) Odour Threshold No data available d) pH No information available

No data available



point	
f) Initial boiling point and boiling range	115 - 117 °C / 239 - 242.6 °F @ 760 mmHg
g) Flash point	27 °C / 80 °F
h) Evaporation rate	No data available
i) Flammability (solid, gas)	Not applicable
j) Upper/lower flammability or explosive limits	No data available
k) Vapour pressure	No data available
I) Vapour density	No data available
m) Specific Gravity	0.980
n) Solubility	No data available
o) Partition coefficient: n octanol/water	No data available
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Molecular formula	C5 H9 Cl O
t) Molecular Weight	120.58

	SECTION 10: Stability and Reactivity				
10.1	Reactive Hazard :	None known, based on information available			
10.2	Chemical stability:	Stable under normal conditions, Moisture sensitive.			
10.3	10.3 Possibility of hazardous None under normal processing. reactions:				
10.4	Conditions to avoid:	Keep away from open flames, hot surfaces and sources of ignition. Incompatible products.			
10.5	Incompatible materials:	Water, Strong bases, Alcohols			
10.6	Hazardous decomposition products :	Carbon monoxide (CO), Carbon dioxide (CO2), Phosgene, Hydrogen chloride gas			
10.7	Hazardous Polymerization	Hazardous polymerization does not occur.			
	SECTION 11: Toxicological information				

SECTION 11: Toxicological information

11.1 Information on toxicological effects



Acute toxicity:

Product Information Component Information 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 ha

Any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Butanoyl chloride	108-12-3	Not listed				

Mutagenic Effects:No information available.Reproductive Effects:No information available.Developmental Effects:No information available.Teratogenicity:No information available.STOT - single exposure:Respiratory systemSTOT - repeated exposure:None knownAspiration hazard:No information availableSymptoms / effects,both acute and delayed:Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: Product is an advantage.		
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 Symptoms of overexposure may be headache,	Mutagenic Effects:	No information available.
Teratogenicity: No information available. STOT - single exposure: Respiratory system None known Aspiration hazard: No information available Symptoms / effects,both acute and Symptoms of overexposure may be headache,	Reproductive Effects:	No information available.
STOT - single exposure: Respiratory system STOT - repeated exposure: None known Aspiration hazard: No information available Symptoms / effects,both acute and Symptoms of overexposure may be headache,	Developmental Effects:	No information available.
STOT - repeated exposure: Aspiration hazard: No information available Symptoms / effects,both acute and Symptoms of overexposure may be headache,	Teratogenicity:	No information available.
Aspiration hazard: No information available Symptoms / effects,both acute and Symptoms of overexposure may be headache,	STOT - single exposure :	Respiratory system
Symptoms / effects,both acute and Symptoms of overexposure may be headache,	STOT - repeated exposure:	None known
	Aspiration hazard :	No information available
	• •	dizziness, tiredness, nausea and vomiting: Product is a

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

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: 2920

IMDG: 2920 IATA: 2920

14.2 UN proper shipping name

ore proper simpling name							
:	Corrosive liquid	Corrosive liquid, flammable, n.o.s.					
	Corrosive liquid	Corrosive liquid, flammable, n.o.s.					
	Corrosive liquid, flammable, n.o.s.						
t hazard class(es)	ADR/RID: 8	ADR/RID: 8 IMDG: 8 IATA: 8					
y Hazard Class	ADR/RID: 3	IMDG: 3	IATA: 3s				
g group:	ADR/RID: II	IMDG: II	IATA: II				
	t hazard class(es) y Hazard Class g group:	: Corrosive liquid Corrosive liquid Corrosive liquid t hazard class(es) ADR/RID: 8 y Hazard Class ADR/RID: 3	: Corrosive liquid, flammable, n.o.s. Corrosive liquid, flammable, n.o.s. Corrosive liquid, flammable, n.o.s. t hazard class(es) ADR/RID: 8 IMDG: 8 y Hazard Class ADR/RID: 3 IMDG: 3				

SECTION 15: Regulatory information

15.1 United states of America Inventory:

Component	CAS-No	TSCA	TSCA Inventory notification Active/Inactive	TSCA - EPA Regulatory Flags	
Butanoyl chloride	108-12-3	Х	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
Butanoyl	108-12-3	Х	-	203-552-	X	X	Х	-	KE-23585
chloride				2					

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

California Proposition 65

chemicals.

This product does not contain any Proposition 65

CERCLA Not applicable

U.S. State Right-to-Know

Regulations

Not applicable

15.2 U.S. State Right-to-Know Regulations:

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland - This product does not contains the following DHS Chemicals.

Security

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
Revision Date: 19-Jan-2018
Print Date: 19-Jan-2018

Revision Summary: This document has been updated to comply with the US
OSHA HazCom

2012 Standard replacing the current legislation under 2 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 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.