



SAFETY DATA SHEET

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

1.1 Product identifiers

Product name	1-Chlorobutane
CAS number	109-69-3
Synonyms	1-Chlorobutane, n-Butyl chloride

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

Identified uses	Laboratory Chemicals
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1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable Liquids (Category 2)
Aspiration Hazard (Category 1)
Short term Acute Aquatic Hazard (Category 3)
Long term Acute Aquatic Hazard (Category 3)

2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal Word	Danger
Hazard statements	Highly flammable liquid and vapor. May be fatal if swallowed and enters airways. Harmful to aquatic life with long lasting effects.
Precautionary statements	Prevention: 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. Avoid release to the environment. Wear protective gloves/ eye protection/ face protection. Response: IF SWALLOWED: Immediately call a POISON CENTER/ doctor. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. Do NOT induce vomiting. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. Storage: Store in a well-ventilated place. Keep cool. Store locked up. Disposal: Dispose of contents/ container to an approved

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None identified.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
1-chlorobutane	butyl chloride	109-69-3	≤100

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled	After inhalation: fresh air.
In case of skin contact	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.
In case of eye contact	After eye contact: rinse out with plenty of water. Remove contact lenses.
If swallowed	After swallowing: caution if victim vomits. Risk of aspiration! Keep airways free. Pulmonary failure possible after aspiration of vomit. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	Carbon dioxide (CO ₂) Foam Dry powder
Unsuitable extinguishing media	For this substance/mixture no limitations of extinguishing agents are given.

5.2 Specific hazards arising from the substance or mixture

Combustible.
Pay attention to flashback.
Vapors are heavier than air and may spread along floors.
Development of hazardous combustion gases or vapours possible in the event of fire.
Forms explosive mixtures with air at ambient temperatures.

5.3 Special protective equipment and precautions for firefighters

Use self-contained breathing apparatus and full bunker gear in fire areas. Evacuate all unprotected personnel from area. Keep containers cool with water fog to minimize swelling taking care not to spread flames with water used for cooling.

5.4 Further information

Flash Point 10 °F / -12 °C

Autoignition Temperature 860 °F / 460 °C

Explosion limits

Upper 10.1 %(V)

Lower 1.8 %(V)

Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge No information available

NFPA

Health	Flammability	Instability	Physical hazards
3	3	0	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. Advice for emergency responders: For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions

6.4 Reference to other sections

See sections 7 and 10.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

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

Hygiene measures

Change contaminated clothing. Wash hands after working with substance.

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.

Incompatibilities

No information available.

SECTION 8: Exposure controls/personal protection**8.1 Occupational exposure limits**

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

8.2 Exposure controls**Appropriate engineering controls**

No information available.

Personal protective equipment**Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Safety glasses.

Skin protection

Flame retardant antistatic protective clothing.

Body Protection

Flame retardant antistatic protective clothing.

Respiratory protection

Protection required when vapours/aerosols are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Control of environmental exposure

Do not let product enter drains. Risk of explosion.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Physical State

Liquid

Appearance	Clear
Odor	Stinging
Odor Threshold	No data available
pH	No data available.
Melting Point/Range	-189 °F / -123 °C
Boiling Point/Range	171 - 172 °F / 77 - 78 °C
Evaporation Rate	No data available
Flammability (solid)	No data available
Flammability or explosive limit	
Upper	10.1 %(V)
Lower	1.8 %(V)
Vapor Pressure	120.6 hPa (68 °F / 20 °C)
Vapor Density	3.2
Density	0.886 g/cm ³ (77 °F / 25 °C)
Solubility	Partly Soluble
	log Pow: 2.66 (68 °F / 20 °C)
Partition coefficient; n-octanol/water	Method: OECD Test Guideline 107 Bioaccumulation is not expected.
Autoignition Temp	860 °F / 460 °C
Decomposition Temp	No data available
Viscosity	No data available
Molecular Formula	C ₄ H ₉ Cl
Molecular Weight	92.57 g/mol
VOC Content(%)	No data available
Oxidizing properties	No data available

9.2 Other safety information No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Vapors may form explosive mixture with air.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

10.3 Possibility of hazardous reactions

Risk of explosion with:

Alkali metals

Alkaline earth metals

sodium amide

Risk of ignition or formation of inflammable gases or vapours with:

Oxidizing agents

Powdered light metals

10.4 Conditions to avoid

Warming.

10.5 Incompatible materials

Plastics and light metals.

10.6 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
1-chlorobutane	2,200 mg/kg (Rat)	-	7.74mg/L 4h

Skin corrosion/irritation

No irritation.

Serious eye damage/eye irritation

No irritation.

Respiratory or skin sensitization

No information available

Germ cell mutagenicity

No information available.

Carcinogenicity

No carcinogenic effects.

Specific target organ toxicity - single exposure

No data available.

Specific target organ toxicity - repeated exposure

No data available.

Reproductive toxicity

No toxicity to reproduction.

Chronic effects

No information available.

11.2 Additional Information

No data available.

SECTION 12: Ecological information

12.1 Toxicity

Product		Species	Test Results	
1-chlorobutane	LC50	Brachydanio	75.6 mg/L	96h
	EC50	Daphnia magna	452 mg/L	48h
	ErC50	Desmodesmus subspicatus	450 mg/L	72h
	EC50	Daphnia magna	16 mg/L	21d
	EC50	Activated sludge	1000 mg/L	3h

12.2 Persistence and degradability

Not readily biodegradable.

12.3 Bio accumulative potential

Bioaccumulation is not expected.

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

SECTION 14: Transport information

DOT (US)

UN Number	UN 1127
Proper Shipping name	Chlorobutanes
Hazard Class	3
Packaging Group	II

IMDG

UN Number	UN 1127
Proper Shipping name	Chlorobutanes
Hazard Class	3
Packaging Group	II

IATA

UN Number	UN 1127
Proper Shipping name	Chlorobutanes
Hazard Class	3
Packaging Group	II

SECTION 15: Regulatory information**US federal regulations**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Listed. 1-Chlorobutane 109-69-3

Superfund Amendments and Reauthorization Act of 1986 (SARA)**SARA 302 Extremely hazardous substance**

Not listed.

SARA 311/312 Hazardous

Fire Hazard

Chronic Health Hazard

SARA 313 (TRI reporting)

Not listed.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not listed.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not listed.

Safe Drinking Water Act

Not listed.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Not listed.

US state regulations

US. Massachusetts RTK - Substance List

Listed. 1-Chlorobutane 109-69-3

US. New Jersey Worker and Community Right-to-Know Act

Listed. 1-Chlorobutane 109-69-3

US. Pennsylvania Worker and Community Right-to-Know Law

Listed. 1-Chlorobutane 109-69-3

California Proposition 65

Not listed.

SECTION 16: Other information

Date of Issue: 06/09/2026

SECTION 17: Disclaimer

The information provided on 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.