

SAFETY DATA SHEET

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

1.1 Product identifiers

Product name Chloroform
CAS number 67-66-3
Synonyms None.

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

Identified uses 67-66-3

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)

Acute toxicity, Oral (Category 4)
Acute toxicity, Inhalation (Category 3)
Skin corrosion/irritation (Category 2)
Carcinogenicity (Category 2)
Reproductive toxicity (Category 2)
Specific Target Organ Toxicity, Repeated Exposure (Category 1)
Hazardous to the aquatic environment, acute hazard (Category 3)

Hazardous to the aquatic environment, long-term hazard (Category 2)

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Danger

Hazard statements

Harmful if swallowed. Toxic if inhaled. Causes skin irritation. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. Causes damage to organs (Kidney, Liver) through prolonged or repeated exposure. Harmful to aquatic life. Toxic to aquatic life with long lasting effects.

Precaution statements

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist/vapors. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor. If exposed or concerned: Get medical advice/attention. Collect spillage.

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

Dispose of contents/container in accordance with local/ regional/ national/ international regulations.

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

No information available

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Chloroform	-	67-66-3	>99%
Ethyl Alcohol	Ethanol	64-17-5	-

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a poison center or doctor/physician.
In case of skin contact	Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
In case of eye contact	Rinse with water. Get medical attention if irritation develops and persists.
If swallowed	Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

Headache. Dizziness. Nausea. Skin irritation. May cause redness and pain. Edema. Jaundice. Prolonged exposure may cause chronic effects.

4.3 Indication of any immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	None known.

5.2 Specific hazards arising from the substance or mixture

During fire, gases hazardous to health may be formed. Thermal decomposition or combustion may produce: hydrogen chloride gas, phosgene.

5.3 Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

5.4 Further information

Use water spray to keep fire-exposed containers cool.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

6.2 Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

6.3 Methods and materials for containment and cleaning up

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.

6.4 Reference to other sections

See section 2 for full list of hazard and precaution statements.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist/vapors. Do not taste or swallow. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment.

Hygiene measures

Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Store locked up. Store in tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

Incompatibilities

None known

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value
Chloroform	Ceiling	240 mg/m ³ 50 ppm
Ethyl Alcohol	PEL	1900 mg/m ³ 1000 ppm

US. ACGIH Threshold Limit Values

Component	Type	Value
Chloroform	TWA	10 ppm
Ethyl Alcohol	STEL	1000 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Chloroform	STEL	9.78 mg/m ³ 2 ppm
Ethyl Alcohol	TWA	1900 mg/m ³ 1000 ppm

Biological occupational exposure limits

None noted for the ingredients.

8.2 Exposure controls

Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety

Personal protective equipment

Eye/face protection

Chemical goggles are recommended

Skin protection

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.

Body Protection

Wear appropriate clothes to protect skin exposure.

Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Respirator type: Chemical respirator with organic vapor cartridge.

Control of environmental exposure

See sections 6 and 7 for further information.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Colorless, clear
Odor	No information available
Odor Threshold	No information available
pH	No information available
Melting Point/Range	(-)83.2 °F (-64 °C)
Boiling Point/Range	141.8 °F (61 °C)
Evaporation Rate	No information available
Flammability (solid)	No information available
Flammability or explosive limit	Not explosive
Vapor Pressure	160 mm Hg (68 °F (20 °C))
Vapor Density	4.12 - (Air = 1.0)
Density	1.492 (77 °F (25 °C))
Solubility	8.7 g/l at 23 °C (73 °F)
Partition coefficient; n-octanol/water	No information available
Autoignition Temp	No information available
Decomposition Temp	Distillable in an undecomposed state at normal pressure.
Viscosity	No information available
Molecular Formula	No information available
Molecular Weight	No information available
VOC Content(%)	No information available
Oxidizing properties	Not oxidizing

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport. Material is stable under normal conditions.

10.2 Chemical stability

Material is stable under normal conditions.

10.3 Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials.

10.5 Incompatible materials

Strong oxidizing agents. Strong bases. Magnesium. Sodium. Sodium oxides. Lithium.

10.6 Hazardous decomposition products

Decomposition products: Hydrogen chloride gas. Phosgene.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Toxic if inhaled

Skin corrosion/irritation

Causes skin irritation

Serious eye damage/eye irritation

Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Toxic if inhaled.

Germ cell mutagenicity

See section 2 for full list of hazard statements.

Carcinogenicity

Component	CAS	IARC	NTP	OSHA
Chloroform	67-66-3	2B	RAHC	Not listed

Specific target organ toxicity - single exposure

May cause drowsiness or dizziness

Specific target organ toxicity - repeated exposure

Oral - Causes damage to organs through prolonged or repeated exposure: Liver, Kidney

Reproductive toxicity

Suspected of damaging the unborn child

Chronic effects

No information available

11.2 Additional Information

Stomach - Irregularities - Based on human evidence

SECTION 12: Ecological information**12.1 Toxicity**

Product		Species	Test Results
Chloroform	EC50	Crassostrea gigas (aquatic invertebrates)	152.5 mg/l - 48h
	ErC50	Chlamydomonas reinhardtii (green algae)	13.3 mg/l - 72h
	NOEC	Daphnia Magna (Water flea)	6.3 mg/l - 21d

12.2 Persistence and degradability

No information available

12.3 Bio accumulative potential

No information available

12.4 Mobility in soil

No information 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**

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**DOT (US)**

UN number: UN1888
Proper shipping name: Chloroform
Hazard Class 6.1

Packaging Group III
Reportable quantity (RQ): 10 lbs

IMDG

UN number: UN1888
Proper shipping name: Chloroform
Hazard Class 6.1
Packaging Group III
Reportable quantity (RQ): 10 lbs

IATA

UN number: UN1888
Proper shipping name: Chloroform
Hazard Class 6.1
Packaging Group III
Reportable quantity (RQ): 10 lbs

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)
Listed

CERCLA Hazardous Substance List (40 CFR 302.4)
Listed

SARA 304 Emergency release notification
Listed - Chloroform - 10 lbs

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
SARA 302 Extremely hazardous substance
Listed - Chloroform - 10 lbs

SARA 311/312 Hazardous
Acute toxicity
Skin corrosion
Carcinogenicity
Reproductive toxicity
Specific target organ toxicity (single or repeated)

SARA 313 (TRI reporting)
Listed

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

Listed

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

Listed

Safe Drinking Water Act

Listed

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

Not regulated

Food and Drug Administration (FDA)

Not regulated

US state regulations

US. Massachusetts RTK - Substance List

Listed

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

Listed

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

Listed

California Proposition 65

Listed

SECTION 16: Other information

Revision date: 06/14/2024

Revision number: 0

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.