

SAFETY DATA SHEET

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

1.1 Product identifiers

Product name	n-Butyl acetate
CAS number	123-86-4
Synonyms	Butyl acetate; Acetic acid, butyl ester; 1-Butyl acetate

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 3
Specific Target Organ Toxicity (single exposure)	Category 3
Serious eye damage/eye irritation	Category 2B

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Warning

Hazard statements

Causes mild skin irritation
Causes eye irritation
May cause respiratory irritation
May cause drowsiness or dizziness
Flammable liquid and vapor

Precautionary statements

Prevention: Wash face, hands and any exposed skin thoroughly after handling
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
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
Wear protective gloves/protective clothing/eye protection/face protection
Keep cool
In case of fire: Use CO₂, dry chemical, or foam to extinguish.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
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 you feel unwell.
Precautionary Statements - Storage
Store in a well-ventilated place. Keep container tightly closed
Store locked up
Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

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

Repeated exposure may cause skin dryness or cracking. May be harmful if inhaled.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
n-Butyl acetate	Butyl acetate; Acetic acid, butyl ester	123-86-4	≤100%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
In case of skin contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention. If skin irritation occurs, get medical attention.
In case of eye contact	Flush eye with water for 15 minutes. Get medical attention.
If swallowed	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Causes eye irritation. May cause irritation of respiratory tract. Dizziness. Drowsiness. Mild skin irritation.

4.3 Indication of any immediate medical attention and special treatment needed

If symptoms persist, call a physician. Treat symptomatically. First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	Carbon dioxide (CO ₂). Dry chemical. Alcohol-resistant foam. Water spray. Water mist may be used to cool closed containers. For larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out. Dike fire-control water for later disposal; do not scatter the material.
Unsuitable extinguishing media	Do not use a solid (straight) water stream as it may scatter and spread fire.

5.2 Specific hazards arising from the substance or mixture

Flammable, May be ignited by heat, sparks or flames, Container explosion may occur under fire conditions or when heated, Vapor may travel considerable distance to source of ignition and flash back, Vapors may form explosive mixtures with air, Most vapors are heavier than air. They will spread along the ground and collect in low or confined areas (sewers, basements, tanks). Hazardous Combustion Products: Carbon oxides.

5.3 Special 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

5.4 Further information

Flash Point Closed cup: 23.9°C/75°F; Open cup: 37°C/98.6°F

Autoignition Temperature 421°C/789.8°F

Explosion limits

Upper 7.60%

Lower 1.70%

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge No information available.

NFPA

Health	Flammability	Instability	Physical hazards
2	2	0	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition. Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use spark-proof tools and explosion-proof equipment. In case of large spill, water spray or vapor suppressing foam may be used to reduce vapors, but may not prevent ignition in closed spaces.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and materials for containment and cleaning up

Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth). In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal. Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Use only non-sparking tools. Clean contaminated surface thoroughly.

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

Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from incompatible materials. Wear personal protective equipment. Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not breathe vapors or spray mist. Do not ingest. When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials. Keep away from heat and sources of ignition.

Incompatibilities

Strong oxidizing agents. Strong acids. Strong bases.

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
n-Butyl acetate	TWA	150 ppm 710 mg/m3

US. ACGIH Threshold Limit Values

Component	Type	Value
n-Butyl acetate	TWA	50 ppm
	STEL	150 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
n-Butyl acetate	STEL	200 ppm 950 mg/m3

Biological occupational exposure limits

No information available.

8.2 Exposure controls

Appropriate engineering controls

Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

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

Wear appropriate protective gloves and clothing to prevent skin exposure.

Body Protection

Chemical resistant apron. Gloves. Long sleeved clothing.

Respiratory protection

Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

Control of environmental exposure

No information available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Colorless
Odor	Sweet
Odor Threshold	0.31 ppm
pH	6.2 @ 20°C
Melting Point/Range	-77.9°C/-108.2°F
Boiling Point/Range	126.5°C/259.7°F
Evaporation Rate	1
Flammability (solid)	Not applicable
Flammability or explosive limit	No data available
Upper	7.60%
Lower	1.70%
Vapor Pressure	1.3
Vapor Density	4.01
Density	0.881
Solubility	Partially soluble in cold water
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	415 °C / 779 °F
Decomposition Temp	No information available
Viscosity	0.83 mPas @ 20°C
Molecular Formula	C6H12O2
Molecular Weight	116.16 g/mol
VOC Content(%)	No information available
Oxidizing properties	Not oxidizing

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerization does not occur.

10.4 Conditions to avoid

Excess heat. Keep away from open flames, hot surfaces, and sources of ignition.
Incompatible materials.

10.5 Incompatible materials

Strong oxidizing agents, Strong acids, Strong bases.

10.6 Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
n-Butyl acetate	10768 mg/kg (Rat) 6 gm/kg (Mouse)	>17600 mg/kg (Rabbit)	390 ppm (Rat) 4h 6 gm/m ³ (Mouse) 4h

Skin corrosion/irritation

It may cause mild skin irritation.

Serious eye damage/eye irritation

Causes eye irritation.

Respiratory or skin sensitization

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
n-Butyl acetate	123-86-4	Not listed	Not listed	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure

Lungs. Mucous membrane. Nervous system.

Specific target organ toxicity - repeated exposure

None known.

Reproductive toxicity

No information available.

Chronic effects

Symptoms of overexposure may be headache, dizziness, tiredness, nausea, and vomiting.

11.2 Additional Information

Inhalation: May cause respiratory tract irritation. May cause drowsiness/sleepiness. May cause dizziness and headache.

Ingestion: May cause digestive/gastrointestinal tract irritation.

SECTION 12: Ecological information

12.1 Toxicity

Do not empty into drains.

Product		Species	Test Results
n-Butyl acetate	EC50	Desmodesmus subspicatus	674.7 mg/L, 72h
	LC50	Lepomis macrochirus	100 mg/L, 96h
	LC50	Leuciscus idus	62 mg/L, 96h
	LC50	Pimephales promelas	17-19 mg/L, 96h
	EC50	Daphnia magna	72.8 mg/L, 24h
	EC50	Microtox	70.0 mg/L, 5 min 82.2 mg/L, 15 min 959 mg/L, 18h 98.9 mg/L, 30 min

12.2 Persistence and degradability

Persistence is unlikely based on information available.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

Will likely be mobile in the environment due to its volatility.

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 consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification. Empty containers should be taken for local recycling, recovery or waste disposal.

SECTION 14: Transport information

DOT (US)

UN-no	UN1123
Proper Shipping Name	BUTYL ACETATES
Hazard Class	3
Packing Group	III

IMDG

UN-no	UN1123
Proper Shipping Name	BUTYL ACETATES
Hazard Class	3
Packing Group	III

IATA

UN-no	UN1123
Proper Shipping Name	BUTYL ACETATES
Hazard Class	3
Packing Group	III

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 applicable.

CERCLA Hazardous Substance List (40 CFR 302.4)

Listed, Butyl acetate (CAS #123-86-4), RQ: 5000 lb.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

See Section 2 for more information.

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

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

Not regulated.

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

Not regulated.

Clean Water Act (CWA)

Listed, Butyl acetate (CAS #123-86-4), RQ: 5000 lb.

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

Listed, Butyl acetate (CAS #123-86-4).

US state regulations

US. Massachusetts RTK - Substance List

Listed, Butyl acetate (CAS #123-86-4).

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

Listed, Butyl acetate (CAS #123-86-4).

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

Listed, Butyl acetate (CAS #123-86-4).

California Proposition 65

Not listed.

SECTION 16: Other information

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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.