

SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

CAS Number: 123-86-4
Product Name: n-Butyl acetate
Revision Date: Feb 14, 2020 **Date Printed:** Feb 14, 2020
Version: 1.0 **Supersedes Date:** N.A.
Manufacturer's Name: Thames River Chemical Corp.
Address: 5230 Harvester Road Burlington, ON, CA, L7L 4X4
Emergency Phone: CHEMTREC (800) 424-9300
Information Phone Number: 905-681-5353
Fax: 905-681-5377
Product/Recommended Uses: For laboratory or industrial use only.

SECTION 2) HAZARDS IDENTIFICATION

Classification

Flammable Liquids - Category 3

Specific Target Organ Toxicity -Single Exposure (Narcotic Effects) - Category 3

Pictograms



Signal Word

Warning

Hazard Statements - Health

May cause drowsiness or dizziness

Hazard Statements - Physical

Flammable liquid and vapor

Precautionary Statements - General

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Precautionary Statements - Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. 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 action to prevent static discharges.

Wear protective gloves/protective clothing/eye protection/face protection.

Avoid breathing dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

Precautionary Statements - Response

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

In case of fire: Use carbon dioxide, alcohol foam, water spray or dry chemical to extinguish.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER or doctor, if you feel unwell.

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool.

Store locked up.

Precautionary Statements - Disposal

Dispose of contents/container in accordance with local/national/international regulation. Waste management should be in full compliance with national, regional and local laws.

Physical Hazards Not Otherwise Classified

No data available.

Health Hazards Not Otherwise Classified

No data available.

SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight
0000123-86-4	BUTYL ACETATE	99% - 100%

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality or to reflect batch to batch variation.

SECTION 4) FIRST-AID MEASURES

Inhalation

Get medical advice/attention if you feel unwell or are concerned. If experiencing respiratory symptoms: Call a POISON CENTER/doctor. Remove source of exposure or move person to fresh air and keep comfortable for breathing. Eliminate all ignition sources if safe to do so. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by the POISON CENTER/doctor.

Eye Contact

Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. If eye irritation persists: Get medical advice/attention.

Skin Contact

Take off immediately all contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Store contaminated clothing under water and wash before re-use or discard. Rinse skin with water/shower and mild soap for 5 minutes or until product is removed.

Ingestion

Rinse mouth. If in doubt, seek medical assistance

Most Important Symptoms and Effects, Both Acute and Delayed

No data available.

Indication of Any Immediate Medical Attention and Special Treatment Needed

No data available.

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam, Polyvalent foam, BC powder, Carbon dioxide, water spray or water fog.

Unsuitable Extinguishing Media

High pressure water streams may scatter hot liquid. Water may be ineffective because it will not cool n-Butyl acetate below its flash point.

Specific Hazards in Case of Fire

Flammable liquid and vapor. Flash point = 27°C (80.6°F) Auto-ignition temperature = 415°C (779°F).

Vapor is heavier than air and may flash back to a leak or open container. Vapors can accumulate in confined spaces, resulting in a toxicity and explosion hazard. Closed containers may rupture violently when heated releasing contents.

Fire-fighting Procedures

Evacuate the area and fight fire from a safe distance or a protected location. Approach the fire from upwind to avoid hazardous vapors.

Use water spray to cool fire-exposed containers.

If a leak or spill has not ignited, use water spray in large quantities to disperse the vapors and to protect personnel attempting to stop a leak. Water spray can be used to dilute spills to non-flammable mixtures and flush spills away from ignition sources. Dike fire control water for appropriate disposal.

Firefighters must wear full protective clothing and an approved, self-contained breathing apparatus. Do not enter without wearing specialized equipment suitable for the situation.

Special Protective Actions

Wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure

Stay uphill and/or upstream. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing. Ventilate closed spaces before entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded. Evacuate and isolate hazard area and keep unauthorized personnel away. A vapor-suppressing foam may be used to reduce vapors.

Recommended Equipment

Wear chemical protective clothing and positive pressure self-contained breathing apparatus (SCBA).

Personal Precautions

Avoid breathing vapor or mist. Avoid contact with skin, eye or clothing.

Environmental Precautions

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers. Dike far ahead of liquid spill for later disposal.

Methods and Materials for Containment and Cleaning up

Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean, non-sparking tools to collect absorbed material. Ventilate area after clean-up is complete.

SECTION 7) HANDLING AND STORAGE

General

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 non-sparking tools.

Take precautionary measures against static discharge. Wash hands after use. Do not get in eyes, on skin or on clothing. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Use good personal hygiene practices.

Eating, drinking and smoking in work areas is prohibited. Remove contaminated clothing and protective equipment before entering eating areas. This product is not intended for human or animal consumption.

Ventilation Requirements

Use only with adequate ventilation to control air contaminants to their exposure limits. Report ventilation failures immediately. The use of local ventilation is recommended to control emissions near the source.

Storage Room Requirements

Do not store large quantities of flammable liquids in the same storage cabinet. Store in dry, cool areas, out of direct sunlight and away from other sources of heat. Store in original containers. Keep containers securely sealed. Keep away from incompatible materials (e.g. oxidizers). Store flammable and combustible liquids in areas that are cool, dry and well ventilated to reduce vapour concentrations. Never use plastic or glass containers for storing flammable liquids. Keep containers securely sealed when not in use. Bond and ground metal containers/cylinders when transferring. Avoid storing in direct sunlight or near other heat sources; eliminate all sources of ignition. Cabinets must be labelled; FLAMMABLE - KEEP FIRE AWAY. Avoid storing in basements. Protect containers against banging or other physical damage when storing, transferring, or using them.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye protection

Wear indirect-vent, impact and splash resistant goggles when working with liquids

Skin Protection

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber.

Respiratory Protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 should be followed. Check with respiratory protective equipment suppliers.

Appropriate Engineering Controls

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

Chemical Name	CANsmg	CANsppm	CANtmg	CANtppm	OSHA STEL (mg/m3)	OSHA STEL (ppm)	OSHA TWA (mg/m3)	OSHA TWA (ppm)
BUTYL ACETATE	950	200	713	150			710	150

Chemical Name	OSHA Carcinogen	OSHA Tables (Z1, Z2, Z3)	OSHA Skin designation	ACGIH STEL (mg/m3)	ACGIH STEL (ppm)	ACGIH TWA (mg/m3)	ACGIH TWA (ppm)	ACGIH TLV Basis
BUTYL ACETATE		1			150		50	Eye & URT irr

Chemical Name	ACGIH Carcinogen	ACGIH Notations
BUTYL ACETATE		

irr - Irritation, URT - Upper respiratory tract

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density	7.36 lb/gal
Specific Gravity	0.88
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Appearance	clear colourless liquid
Odor Description	fruity odor
Odor Threshold	>0.006 ppm
pH	5 (0.5% solution)
Melting/Freezing Point	-90 °C
Low Boiling Point	126°C
High Boiling Point	N/A
Flash Point	27°C
Vapor Pressure	15 hPa at 20°C
Vapor Density	4 (air=1)
Evaporation Rate	1 (n-Butyl Acetate = 1)
Upper Explosion Level	N/A
Lower Explosion Level	N/A
Water Solubility	0.53 g/100 mL in water at 20°C

SECTION 10) STABILITY AND REACTIVITY

Reactivity

No data available.

Stability

Normally stable. Hydrolyzes, slowly, in presence of water and humidity to form n-butanol and acetic acid.

Stable under normal storage and handling conditions.

Conditions to Avoid

Avoid high temperatures and contact with sources of ignition. Avoid exposing product to air.

Hazardous Reactions/Polymerization

Heating above the flashpoint increases fire and explosion hazard.
May react with oxidizing agents: increased risk of fire and explosion.
Incompatible with strong acids and bases: reaction releases heat and may be violent.
May be ignited by sparks and other sources of ignition.

Incompatible Materials

May react with oxidizing agents: increased risk of fire and explosion.
Incompatible with acids, bases, water/moisture, potassium tert-butoxide.

Hazardous Decomposition Products

Hydrolyses to highly flammable n-butanol and corrosive acetic acid.

SECTION 11) TOXICOLOGICAL INFORMATION

Likely Route of Exposure

Inhalation, ingestion, skin absorption

Acute Toxicity

LD50 Oral: 10 700 (rat) (mg/kg)
LD50 Dermal: > 5 000 (rabbit) (mg/kg)
LC50 Inhalation: > 6 000 ppm (rat) (mg/L, 4 hrs.)

Aspiration Hazard

No data available.

Carcinogenicity

No data available.

Germ Cell Mutagenicity

No data available.

Reproductive Toxicity

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Can irritate the respiratory tract.

Respiratory/Skin Sensitization

0000123-86-4 BUTYL ACETATE

Can severely irritate and burn the eyes.

Serious Eye Damage/Irritation

0000123-86-4 BUTYL ACETATE

Can severely irritate and burn the skin.

Skin Corrosion/Irritation

0000123-86-4 BUTYL ACETATE

May cause effects on the central nervous system.

Specific Target Organ Toxicity - Repeated Exposure

No data available.

Specific Target Organ Toxicity - Single Exposure

May cause drowsiness or dizziness

Likely Routes of Exposure

Inhalation, Ingestion, Skin contact, Eye contact

Potential Health Effects - Miscellaneous

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May cause abnormal liver function. The following medical conditions may be aggravated by exposure: respiratory system. Tests for embryotoxic activity in animals has been inconclusive. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The significance of this to man is unknown. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother.

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LC50 (rat): 1802 mg/m³; 4-hour exposure (aerosol)(9) Note: A lower LC50 (aerosol) value of 760 mg/m³ (160 ppm); 4-hour exposure has been reported.(11,27) Extensive research has failed to confirm this value.

LD50 (oral, rat): 10770 mg/kg (12, unconfirmed)

LD50 (oral, mouse): 7100 mg/kg (5)

LD50 (oral, rabbit): 7400 mg/kg (cited as 64 millimols/kg) (13)

LD50 (dermal, rabbit): Greater than 5000 mg/kg (3, unconfirmed)

SECTION 12) ECOLOGICAL INFORMATION

Toxicity

Fish: 96 Hr LC50 Pimephales promelas: 18 mg/L (flow-through)

Crustacea: 48 Hr EC50 Daphnia magna: 44 mg/L

Algae: 72 Hr EC50 Desmodesmus subspicatus: 674 mg/L

Long-term toxicity to aquatic invertebrates: 21 day NOEC: 23 mg/L (OECD 211)

0000123-86-4 BUTYL ACETATE

Mobility in Soil

Low potential for absorption in soil

Bio-accumulative Potential

Low potential for bioaccumulation.

Bioconcentration Factor (BCF) 15.3 (calculated)

Log Kow = 2.3 @ 25°C (OECD 117)

Persistence and Degradability

Material is readily biodegradable in water according to OECD Test 301B for ready biodegradability.

0000123-86-4 BUTYL ACETATE

Readily biodegradable

Other Adverse Effects

No data available.

Results of the PBT and vPvB assessment

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The substance is not PBT / vPvB

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal

Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. It is the responsibility of the user of the product to determine at the time of disposal whether the product meets local criteria for hazardous waste. Waste management should be in full compliance with national, provincial and local laws.

SECTION 14) TRANSPORT INFORMATION

	Transport Canada Information	U.S. DOT Information
UN number:	UN1123	UN1123
Proper shipping name:	Butyl acetates	Butyl acetates
Hazard class:	3	3
Packaging group:	III	III
Hazardous substance (RQ):		No Data Available
Marine Pollutant:	No Data Available	No Data Available
Note / Special Provision:	Note / Special Provision	No Data Available
Toxic-Inhalation Hazard:		No Data Available
Transport in bulk (according to Annex II of MARPOL 73/78):	No Data Available	

SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0000123-86-4	BUTYL ACETATE	99% - 100%	DSL,TSCA,EU_EC_Inventory

SECTION 16) OTHER INFORMATION

Glossary

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDG- Canadian Transportation of Dangerous Goods; CANsmg or CANspmm - Canadian Short Term Exposure Level in mg/L or in ppm; CANtmg or CANtppm - Canadian Time Weighted Average in mg/L or in ppm; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center(US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self Contained Breathing Apparatus; STEL-Short Term Exposure Limit; TCEQ Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.

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