

SAFETY DATA SHEET

Butyl Acetate, n-

This MSDS is valid for all grades that start with catalog number 301

1. IDENTIFICATION OF SUBSTANCE / MIXTURE AND OF SUPPLIER

Product Identifier: High Purity Chemicals
Synonyms: 1-Butyl Acetate; Butyl Ethanoate; Acetic Acid, n-Butyl Ester
Other means of identification: CAS No. 123-86-4
EINECS No. 204-658-1

Recommended use of the chemical and restrictions on use:

Used in the production of lacquers.

Supplier Details:

Pharmco Products, Inc.
58 Vale Road, Brookfield,
CT 06804, USA.
Tel: 203.740.3471
Fax: 203.740.3481
CCN17213

Pharmco Products, Inc.
1101 Isaac Shelby Drive, Shelbyville,
KY 40065, USA.
Tel: 502.232.7600
Fax: 502.633.6100
CCN17213



Emergency Contact: CHEMTREC: 1.800.424.9300 (USA) / +1.703.527.3887 (International)

2. HAZARDS IDENTIFICATION

OSHA Hazards:

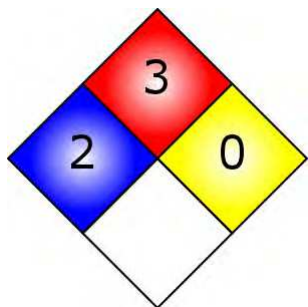
Flammable liquid, Target Organ Effect, Irritant

Target Organs:

Central nervous system

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NFPA



GHS label elements, including precautionary statements



Signal Word:

WARNING!

Hazard statement(s)

H226

Flammable liquid and vapor

H336

May cause drowsiness or dizziness.

Precautionary statement(s)

P261

Avoid breathing dust/fumes/gas/mist/vapors.

P312

Call a POISON CENTER or doctor/ physician if you feel unwell.

P304 + P340

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P303 + P361 + P353

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

P210

Keep away from heat, sparks, open flames, and hot surfaces. No smoking.

P233

Keep container tightly closed.

P235

Keep cool.

P280

Wear protective gloves and eye and face protection.

GHS Classification(s)

Flammable Liquids (Category 3)

Specific target organ toxicity - single exposure (Category 3)

Other hazards which do not result in classification:

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Potential Health Effects:

Organ	Description
Eyes	Causes eye irritation.
Ingestion	May be harmful if swallowed.
Inhalation	May be harmful if inhaled. Causes respiratory tract irritation. Vapors may cause drowsiness and dizziness.
Skin	Harmful if absorbed through skin. Causes skin irritation.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical identity: Butyl Acetate
Common name / Synonym: Acetic acid, n-butyl ester Butyl ethanoate
CAS number: 123-86-4
EINECS number: 204-658-1
ICSC number: 0399
RTECS #: AF7350000
UN #: 1123
EC #: 607-025-00-1

% Weight	Material	CAS
100	n-Butyl Acetate	123-86-4

4. FIRST AID MEASURES

General advice

Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Skin

Get medical aid. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing/shoes.

Inhalation

Remove person to fresh air. If signs/symptoms continue, get medical attention. Give oxygen or artificial respiration as needed.

Eyes

Thoroughly flush the eyes with large amounts of clean low-pressure water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation persists, seek medical attention.

Ingestion

DO NOT induce vomiting. If vomiting does occur, have victim lean forward to prevent aspiration. Rinse mouth with

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water. Seek medical attention. Never give anything by mouth to an unconscious individual.

5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products):

Carbon oxides expected to be the primary hazardous combustion product.

Special protective equipment and precautions for firefighters:

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Keep unopened containers cool by spraying with water.

Unusual Fire and Explosion Hazards:

- Vapors may travel to source of ignition and flash back.
- Vapors may settle in low or confined spaces.

Vapors may form explosive mixture with air.

Flammable Properties

Classification

OSHA/NFPA Class IB Flammable Liquid.

Flash point

22 °C (72 °F) - closed cup

Autoignition temperature

425 °C (797 °F)

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Wear respiratory protection. Do not inhale vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental precautions:

Stop leak. Contain spill if possible and safe to do so. Prevent product from entering drains.

Methods and materials for containment and cleaning up:

Contain spill, then collect with an electrically protected vacuum cleaner or by wet-brushing and put the material into a convenient waste disposal container. Keep container closed.

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7. HANDLING AND STORAGE

Precautions for safe handling:

Do not get on skin or in eyes. Do not inhale vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge. Open and handle container with care. Metal containers involved in the transfer of this material should be grounded and bonded.

Conditions for safe storage, including any incompatibilities:

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters, e.g., occupational exposure limit values or biological limit values:

Occupational Exposure Limits

Component	Source	Type	Value	Note
Butyl Acetate	US (ACGIH)	STEL	200 ppm	
Butyl Acetate	US (ACGIH)	TWA	150 ppm	

Appropriate engineering controls:

Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Individual protection measures, such as personal protective equipment:

Respiratory protection:

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection:

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection:

Use chemical safety goggles and/or a full face shield where splashing is possible. Use equipment approved by appropriate government standards, such as NIOSH (US) or EN166 (EU) Maintain eye wash fountain and quick-drench facilities in work area.

Skin and body protection:

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Hygiene measures:

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Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Liquid. Colorless, clear.
Odor	Fruity
Odor threshold	Specific data not available
pH	Specific data not available
Freezing point	-78 °C (-108 °F)
Initial boiling point and boiling range	126 °C (259°F)
Flash point	22°C (72°F) - closed cup
Evaporation rate	Specific data not available
Flammability (solid, gas)	Flammable
Upper / Lower flammability or explosive limits	7.6% (V) / 1.3% (V)
Vapor pressure	20 hPa (15 mmHg) at 25 °C (77 °F)
Vapor Density	4.01
Relative Density	0.88 g/cm ³ at 25 °C (77 °F)
Solubility(ies)	Slightly soluble
Partition coefficient n-octanol/water(ies)	Specific data not available
Auto-ignition temperature	425 °C (797 °F) - closed cup
Decomposition temperature	Specific data not available
Formula (BUTYL ACETATE)	C ₆ H ₁₂ O ₂
Molecular Weight (BUTYL ACETATE)	116.16 g/mol

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Vapors may form explosive mixture with air.
Conditions to avoid (e.g., static discharge, shock or vibration)	Heat, flames, and sparks.
Incompatible materials	Strong oxidizing agents, Strong reducing agents, Strong bases
Hazardous decomposition products	Carbon oxides are expected to be, under fire conditions, the primary hazardous decomposition products.

11. TOXICOLOGICAL INFORMATION

- Butyl Acetate 123-86-4

Product Summary:

Laboratory experiments have shown teratogenic effects in rats. No data available for the mutagenic or reproductive effects of the product. No data available to designate product as an aspiration hazard or to cause specific target

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organ toxicity through repeated exposure.

Acute Toxicity:

LC50 (Inhalation)	Rat	9.6 - 29.2 mg/L	4 hours
LD50 (Dermal)	Rabbit	17,600 mg/kg	
LD50 (Oral)	Rat	10,700 - 14,130 mg/kg	

Irritation:

Eyes

Rabbit - moderate eye irritation

Respiratory or Skin Sensitization

No data available

Skin

Rabbit - skin irritation - 24 hours

Specific target organ toxicity - single exposure (Globally Harmonized System)

Inhalation - May cause drowsiness or dizziness. - Central Nervous System

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Other Hazards

Organ	Description
Eyes	Irritating to the eyes.
Ingestion	May be harmful if ingested.
Inhalation	May be harmful if inhaled. Irritating to the respiratory tract. Vapors may cause drowsiness and dizziness.
Skin	May be harmful if absorbed through skin. Irritating to the skin.

12. ECOLOGICAL INFORMATION

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Ecotoxicity (aquatic and terrestrial, where available):

Acute Fish Toxicity (BUTYL ACETATE)

LC50 / 96 hours Bluegill - 100 mg/L

Persistence and degradability:

No data available

Bioaccumulative potential:

No data available

Other adverse effects:

No data available

13. DISPOSAL CONSIDERATIONS

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging:

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

14. TRANSPORT INFORMATION

Description of waste residues and information on their safe handling and methods of disposal:

UN number	1123
UN proper shipping name	Butyl acetates
Transport hazard class(es)	3
Packing group (if applicable)	III

Reportable Quantity

5,000 lbs

IMDG

UN-Number: 1123 Class: 3 Packing Group: III

EMS-No: F-E, S-D

Proper shipping name: BUTYL ACETATES

Marine pollutant: No

IATA

UN-Number: 1123 Class: 3 Packing Group: III

Proper shipping name: Butyl acetates

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15. REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product in question:

OSHA Hazards

Flammable liquid, Target Organ Effect, Irritant

All ingredients are on the following inventories or are exempted from listing

Country	Notification
Australia	AICS
Canada	DSL
China	IECS
European Union	EINECS
Japan	ENCS/ISHL
Korea	ECL
New Zealand	NZIoC
Philippines	PICCS
United States of America	TSCA

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard
Chronic Health Hazard
Fire Hazard

CERCLA

Butyl acetate CAS-No. 123-86-4

Massachusetts Right To Know Components

n-Butyl acetate CAS-No. 123-86-4 Revision Date 1993-04-24

Pennsylvania Right To Know Components

n-Butyl acetate CAS-No. 123-86-4 Revision Date 1993-04-24

New Jersey Right To Know Components

n-Butyl acetate CAS-No. 123-86-4 Revision Date 1993-04-24

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California Prop 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**16. OTHER INFORMATION:
INCLUDING INFORMATION ON PREPARATION AND REVISION OF THE SDS**

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