



**Neutron**®Pharmachemical Co.  
Manufacturer of Laboratory Chemical & Pharmaceutical Materials

# SAFETY DATA SHEET

**Creation Date** 22-Sep-2009

**Revision Date** 19-Jan-2018

**Revision Number** 4

## 1. Identification

**Product Name** n-Butyl acetate

**Cat No. :** 1.4920

**CAS-No** 123-86-4  
**Synonyms** Butyl acetate; Acetic acid, butyl ester; 1-Butyl acetate

**Recommended Use** Laboratory chemicals.  
**Uses advised against** Food, drug, pesticide or biocidal product use.  
**Details of the supplier of the safety data sheet**

### Company

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**Emergency Telephone Number**  
125

## 2. Hazard(s) identification

### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|  |            |
|--|------------|
| Flammable liquids                                | Category 3 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Target Organs - Central nervous system (CNS).    |            |

### Label Elements

**Signal Word**  
Warning

**Hazard Statements**  
Flammable liquid and vapor  
May cause drowsiness or dizziness

**Precautionary Statements****Prevention**

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

**Inhalation**

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

**Skin**

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

**Fire**

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Storage**

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

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Repeated exposure may cause skin dryness or cracking

### 3. Composition/Information on Ingredients

| Component       | CAS-No   | Weight % |
|-----------------|----------|----------|
| n-Butyl acetate | 123-86-4 | <=100    |

### 4. First-aid measures

|  |   |
|--|---|
| <b>General Advice</b>                      | If symptoms persist, call a physician.  |
| <b>Eye Contact</b>                         | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.   |
| <b>Skin Contact</b>                        | Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. |
| <b>Inhalation</b>                          | Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.      |
| <b>Ingestion</b>                           | Clean mouth with water and drink afterwards plenty of water.  |
| <b>Most important symptoms and effects</b> | Difficulty in breathing. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting      |

**Notes to Physician** Treat symptomatically

## 5. Fire-fighting measures

**Suitable Extinguishing Media** Water spray, carbon dioxide (CO<sub>2</sub>), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers.

**Unsuitable Extinguishing Media** No information available

**Flash Point** 27 °C / 80.6 °F

**Method -** No information available

**Autoignition Temperature** 415 °C / 779 °F

### Explosion Limits

**Upper** No data available

**Lower** No data available

**Oxidizing Properties** Not oxidising

**Sensitivity to Mechanical Impact** No information available

**Sensitivity to Static Discharge** No information available

### Specific Hazards Arising from the Chemical

Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

### Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

### 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.

### NFPA

**Health**  
2

**Flammability**  
2

**Instability**  
0

**Physical hazards**  
N/A

## 6. Accidental release measures

**Personal Precautions** Ensure adequate ventilation. Use personal protective equipment as required. Remove all sources of ignition. Take precautionary measures against static discharges.

**Environmental Precautions** Should not be released into the environment. Do not flush into surface water or sanitary sewer system.

**Methods for Containment and Clean Up** Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment.

## 7. Handling and storage

**Handling** Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid ingestion and inhalation. Do not get in eyes, on skin, or on clothing. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Use spark-proof tools and explosion-proof equipment. Take precautionary measures against static discharges.

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and flame. Flammables area.

## 8. Exposure controls / personal protection

### Exposure Guidelines

| Component       | ACGIH TLV                    | OSHA PEL   | NIOSH IDLH   | Mexico OEL (TWA)  |
|-----------------|------------------------------|--|--|---|
| n-Butyl acetate | TWA: 50 ppm<br>STEL: 150 ppm | (Vacated) TWA: 150 ppm<br>(Vacated) TWA: 710 mg/m <sup>3</sup><br>(Vacated) STEL: 200 ppm<br>(Vacated) STEL: 950 mg/m <sup>3</sup><br>TWA: 150 ppm<br>TWA: 710 mg/m <sup>3</sup> | IDLH: 1700 ppm<br>TWA: 150 ppm<br>TWA: 710 mg/m <sup>3</sup><br>STEL: 200 ppm<br>STEL: 950 mg/m <sup>3</sup> | TWA: 150 ppm<br>TWA: 710 mg/m <sup>3</sup><br>STEL: 200 ppm |

### Legend

ACGIH - American Conference of Governmental Industrial Hygienists  
 OSHA - Occupational Safety and Health Administration  
 NIOSH IDLH: NIOSH - National Institute for Occupational Safety and Health

### Engineering Measures

Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting/equipment.

### 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 and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

#### Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

#### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

|  |                          |
|--|--------------------------|
| Physical State                         | Liquid                   |
| Appearance                             | Colorless                |
| Odor                                   | sweet                    |
| Odor Threshold                         | 7 - 20 ppm               |
| pH                                     | 6.2 @ 20°C               |
| Melting Point/Range                    | -90 °C / -130 °F         |
| Boiling Point/Range                    | 126 °C / 258.8 °F        |
| Flash Point                            | 27 °C / 80.6 °F          |
| Evaporation Rate                       | 1.0 (ether = 1)          |
| Flammability (solid,gas)               | Not applicable           |
| Flammability or explosive limits       |                          |
| Upper                                  | No data available        |
| Lower                                  | No data available        |
| Vapor Pressure                         | No information available |
| Vapor Density                          | 4                        |
| Specific Gravity                       | 0.881 @ 20C              |
| Solubility                             | insoluble                |
| Partition coefficient; n-octanol/water | No data available        |
| Autoignition Temperature               | 415 °C / 779 °F          |
| Decomposition Temperature              | No information available |
| Viscosity                              | 0.83 mPas @ 20°C         |
| Molecular Formula                      | C6H12O2                  |
| Molecular Weight                       | 116.16                   |
| Refractive index                       | 1.393                    |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactive Hazard</b>                  | None known, based on information available  |
| <b>Stability</b>                        | Stable under normal conditions.   |
| <b>Conditions to Avoid</b>              | Incompatible products. Excess heat. Keep away from open flames, hot surfaces and sources of ignition. |
| <b>Incompatible Materials</b>           | Strong oxidizing agents, Strong acids, Strong bases   |
| <b>Hazardous Decomposition Products</b> | Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> )   |
| <b>Hazardous Polymerization</b>         | Hazardous polymerization does not occur.  |
| <b>Hazardous Reactions</b>              | None under normal processing.   |

## 11. Toxicological information

### Acute Toxicity

#### Product Information Component Information

| Component       | LD50 Oral                  | LD50 Dermal                   | LC50 Inhalation            |
|-----------------|----------------------------|-------------------------------|----------------------------|
| n-Butyl acetate | LD50 = 10768 mg/kg ( Rat ) | LD50 > 17600 mg/kg ( Rabbit ) | LC50 = 390 ppm ( Rat ) 4 h |

**Toxicologically Synergistic Products** No information available

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

|                        |  |
|------------------------|--|
| <b>Irritation</b>      | No information available   |
| <b>Sensitization</b>   | No information available   |
| <b>Carcinogenicity</b> | The table below indicates whether each agency has listed any ingredient as a carcinogen. |

| Component       | CAS-No   | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|-----------------|----------|------------|------------|------------|------------|------------|
| n-Butyl acetate | 123-86-4 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** Central nervous system (CNS)  
**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects, both acute and delayed** Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

### Ecotoxicity

Do not empty into drains.

| Component       | Freshwater Algae                                     | Freshwater Fish   | Microtox   | Water Flea                                |
|-----------------|--|---|--|---|
| n-Butyl acetate | EC50: = 674.7 mg/L, 72h<br>(Desmodesmus subspicatus) | Lepomis macrochirus: LC50:<br>100 mg/L/96H<br>Pimephales promelas:<br>LC50:17-19 mg/L/96h | EC50 = 70.0 mg/L 5 min<br>EC50 = 82.2 mg/L 15 min<br>EC50 = 959 mg/L 18 h<br>EC50 = 98.9 mg/L 30 min | EC50: = 72.8 mg/L, 24h<br>(Daphnia magna) |

**Persistence and Degradability** Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

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

| Component       | log Pow |
|-----------------|---------|
| n-Butyl acetate | 2.3     |

### 13. Disposal considerations

**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.

### 14. Transport information

#### DOT

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

#### TDG

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

#### IMDG/IMO

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

### 15. Regulatory information

#### United States of America Inventory

| Component       | CAS-No   | TSCA | TSCA Inventory notification - Active/Inactive | TSCA - EPA Regulatory Flags |
|-----------------|----------|------|---|-----------------------------|
| n-Butyl acetate | 123-86-4 | X    | ACTIVE  | -                           |

#### Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

#### International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

| Component       | CAS-No   | DSL | NDSL | EINECS    | PICCS | ENCS | AICS | IECSC | KECL     |
|-----------------|----------|-----|------|-----------|-------|------|------|-------|----------|
| n-Butyl acetate | 123-86-4 | X   | -    | 204-658-1 | X     | X    | X    | X     | KE-04179 |

### U.S. Federal Regulations

**SARA 313** Not applicable

**SARA 311/312 Hazard Categories** See section 2 for more information

### CWA (Clean Water Act)

| Component       | CWA - Hazardous Substances | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants |
|-----------------|----------------------------|-----------------------------|------------------------|---------------------------|
| n-Butyl acetate | X                          | 5000 lb                     | -                      | -                         |

**Clean Air Act** Not applicable

**OSHA - Occupational Safety and Health Administration** Not applicable

**CERCLA** Not applicable

| Component       | Hazardous Substances RQs | CERCLA EHS RQs |
|-----------------|--------------------------|----------------|
| n-Butyl acetate | 5000 lb                  | -              |

**California Proposition 65** This product does not contain any Proposition 65 chemicals.

### U.S. State Right-to-Know Regulations

| Component       | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|-----------------|---------------|------------|--------------|----------|--------------|
| n-Butyl acetate | X             | X          | X            | -        | X            |

### U.S. Department of Transportation

Reportable Quantity (RQ): N  
 DOT Marine Pollutant N  
 DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security** This product does not contain any DHS chemicals.

### Other International Regulations

**Mexico - Grade** No information available

## 16. Other information

**Prepared By** Regulatory Affairs  
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**Creation Date** 22-Sep-2009  
**Revision Date** 19-Jan-2018  
**Print Date** 19-Jan-2018  
**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

### **Disclaimer**

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text

**End of SDS**