



## SAFETY DATA SHEET

### BUTYL ACETATE

#### 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Product name: BUTYL ACETATE  
Recommended use: Chemical for industrial  
Manufacturer/Supplier: MODERN CHEMICAL CO., LTD.  
82/80 Soi Ekamai 22 (Nuannoi), Sukhumvit 63,  
Klong Tan Nuea, Watthana, Bangkok 10110  
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Fax No: 0-2715-0908-9, 0-2391-1571-2  
Emergency Telephone No: 0-2715-0897-9, 0-2392-3410-3

#### 2. HAZARDS IDENTIFICATION

##### Label elements

Pictogram



Signal word

Danger

##### Hazard statement(s)

- 1.) Highly flammable liquid and vapour.
- 2.) Causes skin irritation.
- 3.) May be fatal if swallowed and enters airways.
- 4.) May cause drowsiness or dizziness.
- 5.) Toxic to aquatic life with long lasting effects.
- 6.) May damage the unborn child. Suspected of damaging fertility.

##### Precautionary statement(s)

- 1.) Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- 2.) Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.



- 3.) Avoid release to the environment.
- 4.) IF SWALLOWED: call a doctor/physician. Do NOT induce vomiting.
- 5.) IF IN EYES: Rinse cautiously with water for 15 minutes.
- 6.) IF ON SKIN Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Synonym:** Acetic acid; n-butyl ester, Acetic acid butyl ester, Butyl acetate, 1- Butyl acetate, Butyl ethanoate.

Ingredients	% (w/w)	CAS NO.
BUTYL ACETATE	100	123-86-4

### 4. FIRST AID MEASURES

**General advice:**

Show this safety data sheet to the doctor in attendance.

**Inhalation:**

Move to fresh air in case of accidental inhalation of vapors. Keep patient warm. In case of shortness of breath, give oxygen. Apply artificial respiration only if patient is not breathing or under medical supervision. No artificial aspiration mouth to mouth or mouth to nose. Use suitable instruments/apparatus.

**Skin contact:**

Remove contaminated clothing and wash affected skin with soap and water. If signs of poisoning appear, treat as for inhalation. Wash contaminated clothing before reuse. Contaminated combustible material, e.g. clothing ignites more readily and burns fiercely.

**Eye contact:**

If substance has got into the eyes, immediately wash out with plenty of water for at least 15 minutes. Obtain medical attention.

**Ingestion:**

Rinse mouth. **Do not induce vomiting.** Keep patient warm. In case of shortness of breath, give oxygen. Apply artificial respiration only if patient is not breathing or under medical supervision. No artificial aspiration mouth to mouth or mouth to nose. Use suitable instruments/apparatus. Obtain medical attention. Never give anything by mouth to an unconscious person.

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media:**

Extinguish with carbon dioxide, dry chemical, foam. In the event of fire, cool tanks with water spray.



#### **Unsuitable Extinguishing Media:**

Do not use a solid water stream as it may scatter and spread fire.

#### **Specific hazards arising from Chemicals:**

Vapors may form explosive mixture with air. Flash back possible over considerable distance.

#### **Special protective equipment for fire-fighters:**

Wear self-contained breathing apparatus and protective suit.

### **6. ACCIDENTAL RELEASE MEASURES**

#### **Personal precautions:**

Evacuate personnel to safe areas. Do not breathe vapors or spray mist. Wear a positive pressure supplied air respirator, flame retardant antistatic protective clothing. Shut off leaks if without risk. Keep people away from and upwind of spill/leak.

#### **Environmental precautions:**

Contain or absorb leaking liquid with sand or earth, consults an expert. Prevent liquid entering sewers, basements and work pits. If substance has entered a water course or sewer or contaminated soil or vegetation, advise police.

#### **Methods and Material for Containment and Clean Up:**

Soak up with inert absorbent material (e.g. sand, silicagel). Prevent liquid entering sewers, basements and workpits; vapor may create explosive atmosphere. Transfer to covered steel drums. Dispose of promptly.

### **7. HANDING AND STORAGE**

#### **Precautions for Safe Handling & Product Transfer:**

Keep container tightly closed. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only in area provided with appropriate exhaust ventilation. Do not breathe vapors or spray mist. Avoid contact with skin, eyes and clothing.

#### **Conditions for Safe Storage & Unsuitable Materials:**

Keep tightly closed at room temperature in a dry, cool and well ventilated place. Keep away from heat and sources of ignition. Keep out of direct sunlight and away from incompatible material. Store in original container. Electrical equipment should be protected to the appropriate standard.



## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Occupational Exposure Limits:** OEL 724 mg/m<sup>3</sup> (150 ppm), STEL 966 mg/m<sup>3</sup> (200 ppm)

**Appropriate Engineering Controls:** The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Ventilation hoods and fans required when working with organic solvents.

### Individual Protection Measures

**Respiratory protection:** In case of insufficient ventilation, wear suitable respiratory equipment. Required when vapor/aerosols are generated filter A (acc. To DIN 3181) for vapors of organic compounds.

**Hand protection:** Handle with gloves. In case full contact wear gloves from viton material, in splash contact wear gloves from nitrile rubber material. The select protective gloves have to satisfy the specifications of EU Directive 89/686 EEC and standard EN 374 derived from it.

**Eye protection:** Tightly sealed goggles.

**Skin and body Protection:** Chemical resistant apron/flame retardant antistatic protective clothing, heavy duty work shoes.

**Hygiene measure:** Ventilation hoods and fans required when working with organic solvents or in hot melt applications. Keep working clothes separately. Keep away from food, drink and animal feeding stuffs.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Form, Color and Odor:</b> liquid, colourless mild,fruity odor.	<b>Evaporation rate:</b> 100 (n-Bu Acetate = 100)
<b>Melting Point:</b> -77 °C	<b>Specific gravity:</b> 0.875-0.883 g/cm <sup>3</sup> at 20 °C
<b>pH:</b> N/A	<b>Solubility in water:</b> Soluble
<b>Boiling point:</b> 126 °C	<b>Viscosity:</b> 0.69 mPa.sec at 25 °C
<b>Vapour pressure:</b> ~13 mbar at 20 °C	<b>Vapour density:</b> 4 g/l
<b>Lower explosion limits:</b> 1.7 %Vol	<b>Upper explosive limit:</b> 7.6 %Vol
<b>Auto-ignition temperature:</b> 425 °C	<b>Flash point:</b> 26°C
<b>Odour threshold:</b> N/A	<b>Flammability (solid, gas):</b> N/A
<b>Decomposition temperature:</b> N/A	<b>Solubility in other solvents:</b> Soluble in organic solvents
<b>n-octanol/water partition coefficient (log P<sub>ow</sub>):</b> 1.81	



## 10. STABILITY AND REACTIVITY

- Chemical Stability:** Stable under recommended storage conditions.
- Reactions:** No data available
- Possibility of Hazardous Reactions:** No data available
- Conditions to avoid** Heat, flames and sparks
- Materials to be avoided:** Alkali metals, alkali earth metals, metals in powder form, alkali hydroxides, alkali amides, semi metallic hydrogen compounds, perchloric acid, nitrogen oxides, light metals, aluminium chloride, strong oxidizing agents.
- Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide, (Hazardous decomposition products from under fire condition).

## 11. TOXICOLOGICAL INFORMATION

- Acute toxicity:** LD50 Oral - rat – 10768 mg/kg
- Sensitization:** Avoid contact with eyes. After inhalation of vapors: drowsiness. After skin contact: drying out effect resulting in rough and chapped skin. After absorption of large quantities; narcosis.
- Chonic toxicity:** An embryotoxic effect need not be feared when the threshold limit value is observed.
- Further toxicological information:** The product should be handled with the care usual when dealing with chemicals

## 12. ECOLOGICAL INFORMATION

- Toxicity**
- Toxicity to fish: LC<sub>50</sub> – Lidus – 62 mg/l - 96h
- Toxicity to daphnia and other aquatic invertebrates: EC<sub>50</sub> - Daphnia magna – 72.8 mg/l - 24h
- Toxicity to algae: No data available
- Toxicity to bacteria: EC<sub>10</sub> – Ps.Putida – 959 mg/l/ - 18d
- Biodegradability remark:** Biodegradation 98% /28d. Readily biodegradable.
- Bioaccumulative potential:** Distribution; log P (oct): 1.81(experimental). No appreciable bioaccumulation potential is to be expected (log P o/w 1-3).
- Mobility:** No data available
- Affected in any other way:** No data available



### 13. DISPOSAL CONSIDERATIONS

**Material Disposal:**

There are no uniform EC Regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding law and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste or burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations.

**Container Disposal:**

Disposal in compliance with official regulations. Handle contaminated packaging as hazardous waste in the same way of the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

### 14. TRANSPORT INFORMATION

**ADR/RID**

UN-No: 1123

Class: 3

Packing group: III

Proper shipping name: BUTYL ACETATES

**IMDG**

UN-No: 1123

Class: 3

Packing group: III

Ems: F-E, S-D

Marine pollutant: No

Proper shipping name: BUTYL ACETATES

**IATA**

UN-No: 1123

Class: 3

Packing group: III

Proper shipping name: BUTYL ACETATES

### 15. REGULATORY INFORMATION

**GHS – Labelling:****Hazard statement(s)**

H226 Flammable liquid and vapor.

H336 May cause drowsiness or dizziness.

EUH066 Explosive with or without contact with air.

**Precautionary statement(s)**



- P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- P241 Use explosion-proof electrical/ventilating/lighting equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P261 Avoid breathing vapors.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P312 Call a POISON CENTER or doctor/physician if you feel you unwell.
- P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
- P403 + P235 Store in a well-ventilated place. Keep cool.
- P405 Store locked up.

#### **Hazard symbol(s)**

- F Flammable liquid
- X<sub>1</sub> Irritant

#### **R - phrase(s)**

- R10 Flammable.
- R66 Repeated exposure may cause skin dryness or cracking.
- R67 Vapor may cause drowsiness and dizziness.

#### **S - phrase(s)**

- S25 Avoid contact with eyes.

## **16. OTHER INFORMATION**

Modern Chemical Co., Ltd. provides the information contained herein in good faith but makes no representation as to its comprehensive or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

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