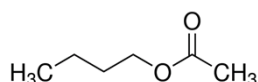


CAS No: 123-86-4 MSDS**MATERIAL SAFETY DATA SHEET (MSDS)****SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Product form : Substance
:
EC no : 204-658-1
CAS No : 123-86-4
Product code : 00060
Chemical structure :

**1.2. Relevant identified uses of the substance or mixture and uses advised against****1.2.1. Relevant identified uses**

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

LOBA CHEMIE PVT.LTD.
107 Wode House Road, Jehangir Villa, Colaba
400005 Mumbai - INDIA
T +91 22 6663 6663 - F +91 22 6663 6699
info@lobachemie.com - www.lobachemie.com

1.4. Emergency telephone number

Emergency number : + 91 22 6663 6663 (9:00am - 6:00 pm)

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Flammable liquids, H226
Category 3
Specific target organ toxicity — Single exposure, Category 3, H336
Narcosis

Full text of classification categories and H statements : see section 16

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Classification according to Directive 67/548/EEC or 1999/45/EC

F; R10-66-67

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS02

GHS07

Signal word (CLP)

: Warning

Hazard statements (CLP)

: H226 - Flammable liquid and vapour

H336 - May cause drowsiness or dizziness

Precautionary statements (CLP)

: P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

EUH phrases

: EUH066 - Repeated exposure may cause skin dryness or cracking

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Name : n-BUTYL ACETATE Extra Pure

CAS No : 123-86-4

EC no : 204-658-1

Full text of R- and H-phrases: see section 16

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : 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.

First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Repeated exposure may cause skin dryness or cracking.

First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth out with water. If you feel unwell, seek medical advice.

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4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May cause drowsiness or dizziness.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO₂).

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapour.

Explosion hazard : May form flammable/explosive vapour-air mixture.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Avoid breathing dust/fume/gas/mist/vapours/spray.

Emergency procedures : Stop release.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect spillage. Take up liquid spill into absorbent material, e.g.: sand. Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.

Precautions for safe handling : No naked lights. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/... equipment.

Storage conditions : Keep container tightly closed.

Incompatible materials : Heat sources.

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7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Hand protection	: protective gloves
Eye protection	: Chemical goggles or safety glasses
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Molecular mass	: 116.16 g/mol
Colour	: Clear Colorless.
Odour	: mild, fruity odor.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: 1
Melting point	: -78 °C
Freezing point	: No data available
Boiling point	: 124 - 126
Flash point	: 23 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Flammable Flammable liquid and vapour
Vapour pressure	: 15 at 25C
Relative vapour density at 20 °C	: 4.01
Relative density	: No data available
Density	: 0.8822 g/cm ³
Relative gas density	: 0.88
Solubility	: Water: 0.7 % @ 20C

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Log Pow	: 1.82
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: 0.017 - 0.076 vol %

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Open flame. Overheating. Direct sunlight. Heat. Sparks.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Skin corrosion/irritation : Not classified

Additional information : Repeated exposure may cause skin dryness or cracking

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

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SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

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Log Pow	1.82

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose of contents/container to ...

Additional information : Handle empty containers with care because residual vapours are flammable.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : 1123

UN-No. (IMDG) : 1123

UN-No.(IATA) : 1123

UN-No.(ADN) : 1123

UN-No. (RID) : 1123

14.2. UN proper shipping name

Proper Shipping Name (ADR) : BUTYL ACETATES

Proper Shipping Name (IMDG) : BUTYL ACETATES

Proper Shipping Name (IATA) : BUTYL ACETATES

Proper Shipping Name (ADN) : BUTYL ACETATES

Proper Shipping Name (RID) : BUTYL ACETATES

Transport document description (ADR) : UN 1123 BUTYL ACETATES, 3, III, (D/E)

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Transport document description (IMDG)	: UN 1123 BUTYL ACETATES, 3, III
Transport document description (IATA)	: UN 1123 BUTYL ACETATES, 3, III
Transport document description (ADN)	: UN 1123 BUTYL ACETATES, 3, III
Transport document description (RID)	: UN 1123 BUTYL ACETATES, 3, III

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR)	: 3
Danger labels (ADR)	: 3

:



IMDG

Transport hazard class(es) (IMDG)	: 3
Danger labels (IMDG)	: 3

:



IATA

Transport hazard class(es) (IATA)	: 3
Hazard labels (IATA)	: 3

:



ADN

Transport hazard class(es) (ADN)	: 3
Danger labels (ADN)	: 3

:



RID

Transport hazard class(es) (RID)	: 3
Danger labels (RID)	: 3

:



14.4. Packing group

Packing group (ADR)	: III
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Packing group (IMDG)	: III
Packing group (IATA)	: III
Packing group (ADN)	: III
Packing group (RID)	: III

14.5. Environmental hazards

Dangerous for the environment	: No
Marine pollutant	: No
Other information	: No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR)	: F1
Limited quantities (ADR)	: 5L
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T2
Portable tank and bulk container special provisions (ADR)	: TP1
Tank code (ADR)	: LGBF
Vehicle for tank carriage	: FL
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Special provisions for carriage - Operation (ADR)	: S2
Hazard identification number (Kemler No.)	: 30
Orange plates	:



Tunnel restriction code (ADR)	: D/E
EAC code	: 3YE

- Transport by sea

Special provision (IMDG)	: 223
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P001, LP01
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T2
Tank special provisions (IMDG)	: TP1
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-D
Stowage category (IMDG)	: A
MFAG-No	: 129

- Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y344
PCA limited quantity max net quantity (IATA)	: 10L
PCA packing instructions (IATA)	: 355

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PCA max net quantity (IATA)	: 60L
CAO packing instructions (IATA)	: 366
CAO max net quantity (IATA)	: 220L
Special provision (IATA)	: A3
ERG code (IATA)	: 3L

- Inland waterway transport

Classification code (ADN)	: F1
Limited quantities (ADN)	: 5 L
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EX, A
Ventilation (ADN)	: VE01
Number of blue cones/lights (ADN)	: 0

- Rail transport

Classification code (RID)	: F1
Limited quantities (RID)	: 5L
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T2
Portable tank and bulk container special provisions (RID)	: TP1
Tank codes for RID tanks (RID)	: LGBF
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Colis express (express parcels) (RID)	: CE4
Hazard identification number (RID)	: 30

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

n-BUTYL ACETATE Extra Pure is not on the REACH Candidate List

n-BUTYL ACETATE Extra Pure is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

AwSV/VwVwS Annex reference : Water hazard class (WGK) 1, slightly hazardous to water (Classification according to VwVwS, Annex 2; WGK No 42)

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12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Denmark

Class for fire hazard : Class II-1

Store unit : 5 liter

Classification remarks : R10 <H226;H336>; Emergency management guidelines for the storage of flammable liquids must be followed

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of R-, H- and EUH-phrases:

Flam. Liq. 3	Flammable liquids, Category 3
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H226	Flammable liquid and vapour
H336	May cause drowsiness or dizziness
EUH066	Repeated exposure may cause skin dryness or cracking
R10	Flammable
R66	Repeated exposure may cause skin dryness or cracking
R67	Vapours may cause drowsiness and dizziness
F	Highly flammable

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product