

NATURO BUTYL ACETATE

Safety Data Sheet

Supersedes: NA

Revision: 1.0

Revision date: 29/03/2024

SECTION 1: Identification

1.1 Identification

Product form	: Substance
Substance name	: N-Butyl Acetate
CAS No	: 123-86-4
EC/ List No	: 204-658-1
Formula	: C ₆ H ₁₂ O ₂
Molecular weight	: 116.2 g/mol
Synonyms	: Biobased butyl acetate, Butyl Acetate.

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

Use of the substance/mixture	: Manufacturing of substances, intermediate.
Relevant identified uses	: As a solvent.

1.3 Details of the supplier of the safety data sheet

Godavari Biorefineries Ltd.
45/47, Somaiya bhavan,
Mahatma Gandhi Road,
Fort, Mumbai -400001, INDIA.
T 0091 22 22048272
Email: alka@somaiya.com
www.somaiya.com

1.4 Emergency telephone Number

Emergency number	: 0091 2423 279308 0091 22 61702100 (Monday – Friday - 09.30 hrs to 18.00 hrs)
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SECTION 2: Hazard(s) identification

GHS classification

2.1 Classification of the substance or mixture

Flammable liquids, Category 3	: H226: Flammable liquid and vapor.
Specific target organ toxicity – Single exposure, Category 3, Narcosis	: H336: May cause drowsiness or dizziness

2.2: GHS labeling

Hazard pictograms (GHS)



GHS02



GHS07

Signal word (GHS)

: Warning.

Hazard statements (GHS)

H226	: Flammable liquid and vapor.
H336	: May cause drowsiness or dizziness.

Precautionary statements (GHS)

P210	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	: Keep the container tightly closed.
P261	: Avoid breathing dust/fume/gas/mist/vapours/spray.

NATURO BUTYL ACETATE

Safety Data Sheet

Supersedes: NA

Revision: 1.0

Revision date: 29/03/2024

- P280 : Wear protective gloves/protective clothing/eye protection/face Protection / hearing protection.
- P303+P361+P353 : IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
- P304+P340 : IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P312 : Call a POISON CENTRE or doctor if you feel unwell.
- P403+P235 - : Store in a well-ventilated place. Keep cool.

2.3 Other hazards

- Other hazards not contributing to the classification : EUH066 - Repeated exposure may cause skin dryness or cracking.

2.4 Unknown acute toxicity (GHS US)

No Data Available.

SECTION 3: Composition/Information on ingredients

3.1 Substance

Substance type	Mono-constituent		
Name	Product Identifier CAS No EC No REACH No.	Concentration %	GHS Classification
N-Butyl Acetate	123-86-4 204-658-1 01-2119485493-29-0080	> 99.0%	H226 Flam. Liq. 3; H336 STOT SE 3

Full text of hazard classes and H-statements: see section 16

3.2 Mixture

None.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General information** : Consult a physician and refer to the safety data sheet.
- Inhalation : Remove the person to fresh air and keep comfortable for breathing. Call a doctor.
- Skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing.
- Eye contact : Rinse eyes with water as a precaution.
- Ingestion : Call a poison center or a doctor if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : May cause drowsiness or dizziness. Cough. Nausea. Unconsciousness. Vomiting. Shortness of breath.
- Symptoms/injuries after skin contact : Repeated exposure may cause skin dryness or cracking.
- Symptoms/injuries after eye contact : None reported.
- Symptoms/injuries after ingestion : None reported.
- Chronic symptoms : None reported.

4.3 Indication of any immediate medical attention and special treatment needed

Seek medical assistance. Treat symptomatically and supportively.

NATURO BUTYL ACETATE

Safety Data Sheet

Supersedes: NA

Revision: 1.0

Revision date: 29/03/2024

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
- Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture

- Fire hazard : Flammable liquid and vapour.
- Explosion hazard : No data available.
- Reactivity : Toxic fumes may be released.

5.3 Advice for firefighters

- Firefighting instructions : Protective actions, In case of fire: keep containers cool by spraying with water. Retain contaminated extinguishing water; do not allow entering into the sewage system.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

- Protective equipment : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus.
- Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing dust/fume/gas/mist/vapours/spray.

6.1.2 For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : If available, follow hazard-control and emergency plans.

6.2 Environmental precautions

In the case of spills: Avoid penetration into the sewage canal, surface water and groundwater.

6.3 Methods and material for containment and cleaning up

- For containment : Stop leak without risks if possible.
- Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

6.4 Reference to other sections

No additional information available.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

NATURO BUTYL ACETATE

Safety Data Sheet

Supersedes: NA

Revision: 1.0

Revision date: 29/03/2024

7.2 Conditions for safe storage, including any incompatibilities

Incompatible products	: Strong acids. Strong bases. Strong oxidizing agents.
Incompatible materials	: Attacks some forms of plastics, rubber, and coatings. Copper.
Prohibitions on mixed storage	: KEEP SUBSTANCE AWAY FROM: Spontaneous combustible materials.
Storage area	: Store in a well-ventilated place. Keep cool. Keep the container tightly closed. Store locked up.
Special rules on packaging	: Only transfer into suited and resistant containers. Containers have to be properly labeled. Keep away from heat / sparks / open flames / hot surfaces and do not smoke.

7.3 Specific end uses

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters




8.1.1 Occupational exposure limits:

The occupational exposure limits (OELs) for N-Butyl Acetate can vary depending on the country and regulatory body. Here are some commonly referenced OELs:

United States (OSHA): The Occupational Safety and Health Administration has established a permissible exposure limit (PEL) for N-Butyl Acetate of 150 parts per million (ppm) as a time-weighted average (TWA) concentration over an 8-hour workday.

European Union (EU): The European Chemicals Agency (ECHA) has set a recommended occupational exposure limit (OEL) for N-Butyl Acetate of 200 ppm as an 8-hour TWA concentration.

8.2 Exposure controls

Appropriate engineering controls	: Ensure good ventilation of the work station. Use explosion-proof equipment. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
Personal protective equipment	: <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="text-align: center;">  <p>Gloves</p> </div> <div style="text-align: center;">  <p>Safety glasses</p> </div> <div style="text-align: center;">  <p>Protective cloths</p> </div> </div>
Materials for protective clothing	: Butyl rubber Butyl glycollate, Neoprene Type : Butoject (Company KCL) or comparable article; or refer to glove manufacturer's recommendation Evaluation : according to EN 374: level 6 Material thickness : approx 0.3 mm Break through time: 480 min Suitable material: butyl-rubber comparable article;
Eye protection	: Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin and body protection	: Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique(without touching the 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.
Respiratory protection	: Wear a dust mask when handling large quantities. In case of insufficient local exhaust: filter respirator for organic vapours (filter type A).
Thermal hazard protection	: No data available.

NATURO BUTYL ACETATE

Safety Data Sheet

Supersedes: NA

Revision: 1.0

Revision date: 29/03/2024

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Colorless liquid
Colour	: Colorless liquid
pH	: 6.2 Temp.: 20 °C Concentration: 5,3 g/L
Melting point	: < -90 °C Pour point (DIN ISO 3016 / ASTM D 97)
Freezing point	: No Data Available
Initial boiling point/boiling range	: 126.2 °C Atm. press.: 1013 hPa (OECD 103)
Flash Point	: 27 °C Atm. press.: 1013 hPa
Relative density	: No Data Available
Relative vapour density at 20°C	: Not determined
Specific gravity/ density	: 0.8812 g/ml
Molecular mass	: 116.2 g/mol
Flammability	: Flammable liquid and vapour.
Upper/lower flammability or Explosive limit	: Not explosive
Solubility	: Water: 5.3 g/l at 20 °C
Vapor pressure	: 11.2 hPa Temp.: 20 °C EU method A.4 (dynamic method)
Partition coefficient n-octanol/water	: 2.3 at 25 °C (OECD 117 / EU A.8, GLP)
Auto-ignition temperature	: 415 °C at 1010 hPa (A.15, GLP)
Decomposition temperature	: No Data Available
Viscosity	: No Data Available
Oxidizing properties	: No Data Available

9.2 Other information

No Data Available.

SECTION 10: Stability and reactivity

10.1 Reactivity	: Flammable liquid and vapour.
10.2 Chemical Stability	: Stable under normal conditions.
10.3 Possibility of hazardous reactions	: No dangerous reactions known under normal conditions of use. Vapours may form explosive mixture with air.
10.4 Conditions to avoid	: Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.
10.5 Incompatible materials	: Strong oxidizing agents. Strong acids. Strong bases.
10.6 Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Likely routes of exposure	: Ingestion, Inhalation; Skin and eye contact
Acute toxicity	: Based on available data, the classification criteria are not met.

N-Butyl Acetate (123-86-4)

LD50 oral toxicity	: 12790 mg/kg body weight Male rat; equivalent or similar to OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method). 10760 mg/kg body weight Female rat; equivalent or similar to OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)
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NATURO BUTYL ACETATE

Safety Data Sheet

Supersedes: NA

Revision: 1.0

Revision date: 29/03/2024

LC50 inhalation toxicity	:	0.74 mg/l Sex: male/female rat; Exp. duration: 4 h
LD50 dermal toxicity	:	> 14000 mg/kg body weight

Skin irritation	:	Not irritating to skin (Conclusive but not sufficient for classification)
Serious eye damage/irritation	:	Not irritating to eyes (Conclusive but not sufficient for classification)
Respiratory or skin sensitization	:	No sensitizing effect known (Conclusive but not sufficient for classification)
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 (Conclusive but not sufficient for classification)
Aspiration hazard	:	Not classified.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately. Handle in accordance with good industrial hygiene and safety practice.

11.2 Endocrine disrupting properties

No data available.

SECTION 12: Ecological information

12.1 Toxicity

Ecology – general	:	The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Ecology – air	:	No hazard identified.
Ecology – water	:	Not classified (Conclusive but not sufficient for classification)

N-Butyl Acetate (123-86-4)

	Toxicity to Fish	Toxicity to aquatic invertebrates	Toxicity to Microorganisms
Species	Pimephales promelas	Daphnia	Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) Algae
Value	18 mg/l Test organisms (species)	EC 50 = 44 mg/L test organisms (species).	397 mg/L Test organisms (species)
Exposure time	96 hrs	48 hrs	72 hrs
Test method : OECD	OECD 236	OECD 202	OECD 201

12.2 Persistence and degradability

N-Butyl Acetate (123-86-4)

Persistence and degradability : **N-Butyl Acetate** (123-86-4) is readily biodegradable.

12.3 Bioaccumulative potential

N-Butyl Acetate (123-86-4)

Log Pow	:	Log Pow 2.3 at 25°C
Bioaccumulative potential	:	N-Butyl Acetate (123-86-4) is not expected to bioaccumulate.

12.4 Mobility in soil

N-Butyl Acetate (123-86-4)

Surface tension	:	61.3 mN/m at 20 °C (OECD 115 / EU A.5, GLP)
Ecology – soil	:	No Data Available.

NATURO BUTYL ACETATE

Safety Data Sheet

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Revision: 1.0

Revision date: 29/03/2024

12.5 Results of PBT and vPvB assessment

The substance is not PBT / vPvB.

12.6 Other adverse effects

No Data Available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste disposal recommendations : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14 : TRANSPORT INFORMATION

Marine transport (IMDG)

UN number : UN 1123


Proper shipping name and description : BUTYL ACETATES

Hazard Class : 3

Subsidiary Risk : 3

Packaging group : III

Marine pollutant : -

Hazard Labels :  3 - Flammable liquid

EMS Code : F-E, S-D

Air transport ICAO/IATA


UN number : UN 1123

Proper shipping name and description : Butyl acetates

Hazard Class : 3

Subsidiary Risk : 3

Packaging group : III

Hazard Labels :  3 - Flammable liquid

Department of Transportation (DOT)

UN Number : UN 1123


Proper Shipping Name and description : BUTYL ACETATES

Transport hazard class : 3

Packing group : III

Reportable Quantity (RQ) : 5000 lbs

Poison Inhalation Hazard : -

Hazard labels :  3 - Flammable liquid

NATURO BUTYL ACETATE

Safety Data Sheet

Supersedes: NA

Revision: 1.0

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SECTION 15: Regulatory information

15.1 National regulations

N-Butyl Acetate (123-86-4)

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

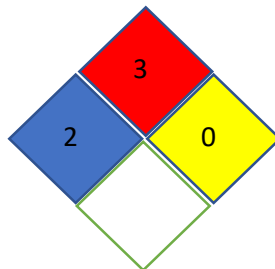
Country	National Inventories	Listing
US Federal Regulations	TSCA	Listed
European Inventory of Existing Commercial Chemical Substances	EINECS	Listed
Chinese Chemical Inventory of Existing Chemical Substances	China IECSC	Listed
New Zealand Inventory of Chemicals	NZIoC	Listed
Canada	Domestic Substances List (DSL)	Listed
Philippine Inventory of Chemicals and Chemical Substances	PICCS	Listed
South Korea	Existing Chemicals Subject to Registration under K-REACH(without PEC)	Listed

SECTION 16: Other information

16.1 Hazard Statement

- H226 : Flammable liquid and vapor.
H336 : May cause drowsiness or dizziness.

16.2 NFPA Rating



16.3 Abbreviations and acronyms

- PBT =Persistent Bioaccumulative and Toxic
vPvB= Very Persistent and Very Bioaccumulative
SCBA= Self Contained Breathing Apparatus
NIOSH REL= National Institute for Occupational Safety and Health Recommended Exposure Limit
OSHA PEL=Occupational Safety and Health Administration Permissible Exposure Limit
OELTWA= Occupational Exposure Limit Time Weighted Averages
IDLH= Immediately Dangerous to Life or Health
UEL= Upper Explosive Limit
LEL= Lower Explosive Limit
RTECS= Registry of Toxic Effects of Chemical Substances
NTP=National Toxicology Programm
IARC= International Agency for Research on Cancer

NATURO BUTYL ACETATE

Safety Data Sheet

Supersedes: NA

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EPA=Environmental Protection Agency

TSCA= Toxic Substances Control Act

NFPA= National Fire Protection Association

CSR=Chemical Safety Report

BCF = Bio Concentration Factor

DNEL = Derived No Effect Level

PNEC = Predicted No Effect Concentration

TLV = Threshold Limit Value

ACGIH = American Conference of Governmental Industrial Hygienist

REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals

CLP = Classification, Labelling and Packaging

LD / LC = Lethal Doses / Lethal Concentration

GHS = Globally Harmonised System

ADR = Accord europeen relative au transport international de marchandises

IMDG-Code = International Maritime Code for Dangerous Goods

EmS = Emergency measures on Sea

ICAO = International Civil Aviation Organization

IATA/DGR= International Air Transport Association/Dangerous Goods Regulation

16.4 Further information:

Information in this SDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made and Godavari Biorefineries Ltd assumes no liability resulting from the use of this SDS. The user must determine suitability of this information for his application.