

Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Product name: Butyl acetate

Product code(SDS NO): 31280jis_J_E1-1

Details of the supplier of the safety data sheet

Manufacturer/Supplier: JUNSEI CHEMICAL CO., LTD.

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Division: Quality Assurance Department

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2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture

PHYSICAL HAZARDS

Flammable liquids: Category 2

HEALTH HAZARDS

Serious eye damage/eye irritation: Category 2B

Specific target organ toxicity – single exposure: Respiratory tract irritation Category 3

Specific target organ toxicity – single exposure: Narcosis Category 3

ENVIRONMENT HAZARDS

Hazardous to the aquatic environment – acute hazard: Category 3

(Note) GHS classification without description: Not applicable/Out of classification/Not classifiable

Label elements



Signal word: Danger

HAZARD STATEMENT

Highly flammable liquid and vapor

Causes eye irritation

May cause respiratory irritation

May cause drowsiness or dizziness

Harmful to aquatic life

PRECAUTIONARY STATEMENT

Prevention

Avoid release to the environment.

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.

Avoid breathing dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

Wash contaminated parts thoroughly after handling.

Wear protective gloves and face protection.

Response

In case of fire: Use appropriate media other than water for extinction.

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

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

Storage

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

Store locked up.

Disposal

Dispose of contents/container in accordance with local/national regulation.

Physical and Chemical hazards

Highly flammable liquid. Vapor/air mixture may explode.

3. Composition/information on ingredients

Substance/Mixture:

Substance

Ingredient name: Butyl acetate

Content(%): 99.0 <

Chemical formula: C₆H₁₂O₂

Chemicals No, Japan: 2-731

CAS No.: 123-86-4

MW: 116.16

ECNO: 204-658-1

4. First-aid measures

Descriptions of first-aid measures

General measures

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

IF INHALED

Remove person to fresh air and keep comfortable for breathing.

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

IF ON SKIN (or hair)

Take off immediately all contaminated clothing. Rinse skin with water/shower.

If skin irritation or rash occurs: Get medical advice/attention.

IF IN EYES

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF SWALLOWED

Rinse mouth. Do NOT induce vomiting.

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

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

In case of fire, use water mist, foam, dry powder, CO₂.

Specific hazards arising from the substance or mixture

- Containers may explode when heated.
- Fire may produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may cause pollution.

Advice for firefighters

Specific fire-fighting measures

- Evacuate non-essential personnel to safe area.
- Cool container with water spray.

Special protective equipment and precautions for fire-fighters

- Wear fire/flame resistant/retardant clothing.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Firefighters should wear self-contained breathing apparatus with full face piece operated positive pressure mode.

6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

- Ventilate area after material pick up is complete.
- Wear proper protective equipment.

Environmental precautions

- Avoid release to the rivers, lakes, ocean, groundwater.

Methods and materials for containment and cleaning up

- Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

Preventive measures for secondary accident

- Collect spillage.

7. Handling and storage

Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

- Avoid breathing dust/fume/gas/mist/vapors/spray.

(Protective measures against fire & explosion)

- Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
- Ground/bond container and receiving equipment.
- Use explosion-proof electrical/ventilating/lighting equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.

Exhaust/ventilator

- Exhaust/ventilator should be available.

Safety treatments

- Avoid contact with skin.
- Avoid contact with eyes.
- Avoid breathing dust, vapor, mist, or gas.

Safety Measures/Incompatibility

- Use only outdoors or in a well-ventilated area.
- Wear protective gloves, protective clothing or face protection.
- Wear protective gloves and face protection.
- Use personal protective equipment as required.
- When using do not eat, drink or smoke.

Conditions for safe storage, including any incompatibilities

Recommendation for storage

- Store in a well-ventilated place. Keep container tightly closed. Keep cool.
- Keep cool. Protect from sunlight.

Store locked up.

8. Exposure controls/personal protection

Control parameters

Control value

Japan control value (2012) ≤ 100 ppm

Adopted value

JSOH(1994) 100ppm; 475mg/m³

ACGIH(2015) TWA: 50ppm

STEL: 150ppm (Eye & URT irr)

OSHA-PEL

TWA 150ppm, 710mg/m³

Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Eye wash station should be available.

Washing facilities should be available.

Individual protection measures

Respiratory protection

Wear respiratory protection.

Hand protection

Wear protective gloves.

Eye protection

Wear eye/face protection.

Safety and Health measures

Wash ... thoroughly after handling.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical properties

Appearance: Volatile liquid

Color: Colorless

Odor: Characteristic odor

pH data N.A.

Phase change temperature

Initial Boiling Point/Boiling point: 126°C

Melting point/Freezing point: -78°C

Decomposition temperature data N.A.

Flash point: (c.c.) 22°C

Auto-ignition temperature: 420°C

Explosive properties: Flammability or explosive limit

lower limit: 1.2 vol %

upper limit: 7.6 vol %

Vapor pressure: 1.2 kPa (20°C)

Relative Vapor Density (Air=1): 4.0

Relative density of the Vapor/air-mixture at 20°C (Air = 1): 1.04

Specific gravity/Density: 0.878~0.883g/ml (20°C)

Solubility

Solubility in water: 0.7 g/100 ml (20°C)

Solubility in solvent: Miscible with ethanol, ethyl ether.

n-Octanol /water partition coefficient: log Pow1.78

10. Stability and Reactivity

Reactivity

Runaway polymerization will not occur.

Chemical stability

Stable under normal storage/handling conditions.

Flammable.

Possibility of hazardous reactions

The vapour is heavier than air and may travel along the ground; distant ignition possible.

Reacts with strong oxidants, strong acids and strong bases. This generates fire and explosion hazard.

Attacks many plastics and rubber.

Conditions to avoid

Contact with incompatible materials.

Open flames. Heat.

Incompatible materials

Strong acids, Strong bases, Strong oxidizing agents

Hazardous decomposition products

Carbon oxides

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Acute toxicity (Oral)

[GHS Cat. Japan, base data]

rat LD50 >3200 mg/kg (SIDS, 2009 et al.)

Acute toxicity (Dermal)

[GHS Cat. Japan, base data]

rabbit LD50 >5000 mg/kg (SIDS, 2009 et al.)

Labor standard law, Japan; Toxic

Butyl acetate

Irritant properties

Skin corrosion/irritation

[GHS Cat. Japan, base data]

human : not irritating (SIDS, 2009)

Serious eye damage /irritation

[GHS Cat. Japan, base data]

rabbit : A minor to moderate conjunctival irritation developed in all animals. All of these signs recover after 48 hours. (SIDS, 2009)

No Allergenic and sensitizing effects data available

Germ cell mutagenicity

[GHS Cat. Japan, base data]

in vivo data N.A.

Reverse-mutation assay in bacteria (Ames test) : Negative (SIDS, 2009 et al.)

Chromosome aberration test : Negative (SIDS, 2009 et al.)

No Carcinogenic effects data available

No reproductive toxicity data available

Delayed and immediate effects and also chronic effects from short- and long-term exposure

STOT

STOT-single exposure

[cat.3(resp. irrit.)]

[Japan published data]

Respiratory tract irritation (CICAD 64 2005)

[cat.3(drow./dizz.)]

[Japan published data]

Narcosis (CICAD 64 2005)

No Aspiration hazard data available

12. Ecological Information

Toxicity

Aquatic toxicity

Harmful to aquatic life

Aquatic acute toxicity component(s) data

[GHS Cat. Japan, base data]

Fish (fat head minnow) LC50 = 18 mg/L/96hr (CICAD 64, 2005)

Aquatic chronic toxicity component(s) data

[GHS Cat. Japan, base data]

Plants (Scenedesmus subspicatus) EC10 = 296 mg/L/72hr (CICAD 64, 2005)

Water solubility

0.7 g/100 ml (20°C) (ICSC, 2003)

Persistence and degradability

Degrade rapidly [BOD_Degradation : 98% (SIDS, 2009)]

Bioaccumulative potential

log Pow = 1.78 (PHYSPROP Database, 2009)

13. Disposal considerations

Waste treatment methods

Avoid release to the environment (- if this is not the intended use).

Dispose of contents/container in accordance with local/national regulation.

14. Transport Information

UN No, UN CLASS

UN number: 1123

UN proper shipping name: BUTYL ACETATES

Transport hazard class(es): 3

Packing group: II

ERG GUIDE NO.: 129

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

Noxious Liquid ; Cat. Y...Butyl acetate

15. Regulatory Information

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

US major regulations

TSCA

Butyl acetate

Other regulatory information

We are not able to check up the regulatory information in regard to the substances in your country or region, therefore, we request this matter would be filled by your responsibility.

Regulatory information with regard to this substance in your country or in your region should be examined by your own responsibility.

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

16. Other information

GHS classification and labelling

Flam. Liq. 2: H225 Highly flammable liquid and vapor
Eye Irrit. 2B: H320 Causes eye irritation
STOT SE 3: H335 May cause respiratory irritation
STOT SE 3: H336 May cause drowsiness or dizziness
Aquatic Acute 3: H402 Harmful to aquatic life

Reference Book

Globally Harmonized System of classification and labelling of chemicals, (5th ed., 2013), UN
Recommendations on the TRANSPORT OF DANGEROUS GOODS 18th edit., 2013 UN
Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012)
2012 EMERGENCY RESPONSE GUIDEBOOK(US DOT)
2016 TLVs and BEIs. (ACGIH)
<http://monographs.iarc.fr/ENG/Classification/index.php>
Supplier's data/information
Chemical Risk Information Platform (CHRIP)(NITE) <http://www.safe.nite.go.jp/japan/db.html>
GHS Classification Guidance for Enterprises 2013 Revised Edition (August, 2013, METI)

General Disclaimer

This information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. It are advised to make their own tests to determinate the safety and suitability of each such product or combination for their own purposes.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

The GHS classification data given here is based on current Japan official data (NITE published in 2015).