

Butyl lactate

Safety Data Sheet

According to Regulation (EC) N° 1907/2006 (REACH), with its amendment Regulation (UE)



SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Substance
Name : Butyl lactate
EC-No. : 252-036-3
CAS-No. : 34451-19-9
REACH registration No : 01-2120767264-50-0002

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 : Industrial manufacturing and (co)formulation of chemicals

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

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GALACTIC INC.
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Milwaukee, WI 53209
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1.4. Emergency telephone number Para España: 704-100-087

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital, Guy's & St Thomas' Hospital Trust	Dudley Road B18 7QH Birmingham	0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours)	-
USA	American Association of Poison Control Centers	515 King Street, Suite 510 VA 22314 Alexandria	1-800-222-1222	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin Irrit. 2 H315
Eye Dam. 1 H318
STOT SE 3 H335

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

Adverse physicochemical, human health and environmental effects

Causes skin irritation. Causes serious eye damage. May cause respiratory irritation.

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2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Hazard statements (CLP)

: H315 - Causes skin irritation.
H318 - Causes serious eye damage.
H335 - May cause respiratory irritation.

Precautionary statements (CLP)

: P261 - Avoid breathing vapours.
P264 - Wash hands thoroughly after handling.
P280 - Wear eye protection, protective gloves, protective clothing, face protection.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a doctor, a POISON CENTER.

2.3. Other hazards

Other hazards not contributing to the classification

: None under normal conditions.

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type

: Mono-constituent

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Butyl lactate	(CAS-No.) 34451-19-9 (EC-No.) 252-036-3 (REACH-no) 01-2120767264-50-0002	> 97	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Move the affected person away from the contaminated area and into the fresh air. If irritation persists, consult a doctor.

First-aid measures after skin contact : Remove all contaminated clothing and footwear. Rinse immediately with plenty of water. In case of redness or irritation, call a doctor.

First-aid measures after eye contact : Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist if irritation persists.

First-aid measures after ingestion : Rinse mouth out with water. Never attempt to induce vomiting. Get medical advice/attention.

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

Symptoms/effects after inhalation : Irritation of the respiratory tract.

Symptoms/effects after skin contact : Causes skin irritation.

Symptoms/effects after eye contact : Serious damage to eyes.

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 : Water spray. Dry powder. Carbon dioxide (CO₂). Foam.

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5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon oxides (CO, CO₂).

5.3. Advice for firefighters

Firefighting instructions : Cool down the containers exposed to heat with a water spray. Contain the extinguishing fluids by bunding.

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

Emergency procedures : Avoid contact with skin and eyes. Do not breathe vapours. In case of important spillage : Only qualified personnel equipped with suitable protective equipment may intervene.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Contain the spilled material by bunding. Do not discharge into drains or rivers.

6.3. Methods and material for containment and cleaning up

For containment : Liquid spill: take up in sand, earth, vermiculite.

Methods for cleaning up : Wash non-recoverable remainder with large amounts of water.

Other information : Dispose of contaminated materials in accordance with current regulations.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe vapours.

Hygiene measures : Do not drink, eat or smoke in the workplace. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed and dry. Protect from heat and direct sunlight. Keep away from ignition sources.

Incompatible products : Strong oxidizing agents. Strong acids. Bases. Water.

Storage temperature : < 200 °C

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Butyl lactate (34451-19-9)	
PNEC (Water)	
PNEC aqua (freshwater)	42.8 µg/l
PNEC aqua (marine water)	4.28 µg/l
PNEC aqua (intermittent, freshwater)	428 µg/l
PNEC aqua (intermittent, marine water)	42.8 µg/l

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protective equipment:

Gloves. Face-shield.

Hand protection:

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Protective gloves

Eye protection:

Face-shield

Skin and body protection:

Protective clothing

Respiratory protection:

If the ventilation is suitable, it is not essential to wear respiratory equipment. Mist formation: aerosol mask with filter type P2

Personal protective equipment symbol(s):



Environmental exposure controls:

Take all necessary precautions to avoid the accidental release of the product outside, due to the rupture of containers or transfer systems.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Molecular mass	: 146 g/mol
Colour	: No data available
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: -23 °C
Freezing point	: No data available
Boiling point	: 187 °C
Flash point	: 79 °C
Auto-ignition temperature	: 382 °C
Decomposition temperature	: > 187 °C
Flammability (solid, gas)	: Not applicable
Vapour pressure	: 0.3 mbar (20 °C)
Relative vapour density at 20 °C	: 4.7
Relative density	: 0.975 - 0.985
Solubility	: Water: 45 g/l (20°C)
Log Pow	: 1.1 (20°C)
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 3.9 mPa.s (25 °C)
Explosive properties	: Not applicable.
Oxidising properties	: Not applicable.
Explosive limits	: 1 - 7.9

9.2. Other information

Refractive index	: 1.418 - 1.422
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SECTION 10: Stability and reactivity

10.1. Reactivity

To our knowledge, the product does not present any particular risk.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

None under normal conditions.

10.4. Conditions to avoid

High temperature (> 79°C). Heat. Sparks. Open flame.

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10.5. Incompatible materials

Strong oxidizing agents. Strong acids. Bases. Water.

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

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal) : Not classified (Lack of data)
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

Butyl lactate (34451-19-9)	
LD50 oral rat	> 2000 mg/kg (OECD 401 method)
LC50 inhalation rat	> 5.14 mg/l (OECD 403 method)

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye damage.
Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met (OECD 429).
Respiratory sensitisation : Lack of data)
Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity : Not classified (Lack of data)
Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure : May cause respiratory irritation.
STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard : Not classified (Lack of data)

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity : Not classified
Chronic aquatic toxicity : Not classified

Butyl lactate (34451-19-9)	
LC50 fish	75 mg/l Brachydanio rerio (zebra-fish)(OECD 203 method)
EC50 Daphnia	423 mg/l/48h (Daphnia magna)(OECD 202 method)
ErC50 (algae)	195.31 mg/l/72h (OECD 201 method)

12.2. Persistence and degradability

Butyl lactate (34451-19-9)	
Persistence and degradability	Readily biodegradable.

12.3. Bioaccumulative potential

Butyl lactate (34451-19-9)	
Log Pow	1.1 (20°C)

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

Waste treatment methods : Dispose of in accordance with relevant local regulations.
Additional information : Empty the packaging completely prior to disposal. Recycle or dispose of in compliance with current legislation.

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SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions for user

Special transport precautions : No additional information available

- Overland transport

Not regulated

- Transport by sea

Not regulated

- Air transport

Not regulated

- Inland waterway transport

Not regulated

- Rail transport

Not regulated

14.7. Transport in bulk according to Annex II of Marpol 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

Butyl lactate is not on the REACH Candidate List

Butyl lactate is not on the REACH Annex XIV List

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

For this substance a chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

This sheet has been revised completely (changes were not marked).

Data sources : SDS of suppliers.

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Full text of H- and EUH-statements:

Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

SDS EU (REACH Annex II)

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

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