

Safety Data Sheet

BUTYLGLYCOL

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Version: 4.0

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(30034845/SDS_GEN_CR/EN)

1. Identification

Product identifier used on the label

BUTYLGLYCOL

Recommended use of the chemical and restriction on use

Recommended use*: process chemical, solvent(s)

Recommended use*: process chemical; solvent(s)

Unsuitable for use: Not intended for sale to or use by the general public.

* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:

BASF de Costa Rica S.A.
Building Epic Corporate Center, First Floor,
Trenos Montealegre, Escazu
San Jose, COSTA RICA

Telephone: +506 2201-1990

Emergency telephone number

24 Hour Emergency Response Information

CHEMTREC 1-703-527-3887

Centro Nacional de Control de Intoxicaciones: (506 2223-1028/222-0122/911)

Other means of identification

Chemical family: organic compounds

2. Hazards Identification

According to Executive Decree No. 40457-S

Classification of the product

Flam. Liq.	4	Flammable liquids
Eye Irrit.	2A	Eye irritation
Acute Tox.	4 (oral)	Acute toxicity
Skin Irrit.	2	Skin irritation

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Label elements

Pictogram:



Signal Word:
Warning

Hazard Statement:

H227	Combustible liquid.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H302	Harmful if swallowed.

Precautionary Statements (Prevention):

P280	Wear protective gloves and eye protection or face protection.
P280	Wear eye protection.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P270	Do not eat, drink or smoke when using this product.
P264	Wash contaminated body parts thoroughly after handling.

Precautionary Statements (Response):

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P330	Rinse mouth.
P332 + P313	If skin irritation occurs: Get medical attention.
P337 + P313	If eye irritation persists: Get medical attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P370 + P378	In case of fire: Use alcohol-resistant foam, carbon dioxide, dry powder or water spray for extinction.

Precautionary Statements (Storage):

P403	Store in a well-ventilated place.
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Precautionary Statements (Disposal):

P501	Dispose of contents/container in accordance with local regulations.
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Hazards not otherwise classified

No data available.

3. Composition / Information on Ingredients

According to Executive Decree No. 40457-S

2-butoxyethanol

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CAS Number: 111-76-2
Content (W/W): > 99.0 - < 100.0%
Synonym: 2-Butoxyethanol; Ethylene glycol monobutyl ether

4. First-Aid Measures

Description of first aid measures

General advice:

Remove contaminated clothing. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). If not breathing, give artificial respiration. First aid personnel should pay attention to their own safety.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

If on skin:

Wash thoroughly with soap and water

If in eyes:

Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing. Seek medical attention.

If swallowed:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: Overexposure may cause: skin irritation, irritation of respiratory tract, erythema, nausea, headache, vomiting, diarrhea, abdominal cramps, hemolysis, blood in urine, CNS depression
Hazards: Skin resorption hazard.

Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.
(Further) symptoms and / or effects are not known so far

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment:	Treat according to symptoms (decontamination, vital functions), no known specific antidote.
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5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
dry powder, water spray, carbon dioxide, alcohol-resistant foam

Unsuitable extinguishing media for safety reasons:
water jet

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Additional information:
Use extinguishing measures to suit surroundings.

Special hazards arising from the substance or mixture

Hazards during fire-fighting:
Flammable liquid Cool endangered containers with water-spray. See SDS section 7 - Handling and storage.

Advice for fire-fighters

Protective equipment for fire-fighting:
Wear a self-contained breathing apparatus. Special protective equipment for firefighters

Further information:

Evacuate area of all unnecessary personnel. Fight fire from maximum distance.

Extend fire extinguishing measures to the surroundings. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Impact Sensitivity:

Remarks: Based on the chemical structure there is no shock-sensitivity.

6. Accidental release measures

Further accidental release measures:

High risk of slipping due to leakage/spillage of product.

Release of substance/product can cause fire or explosion. Shut off or stop source of leak. Shut off or stop released substance/product under safe conditions.

Pack in tightly closed containers for disposal.

Personal precautions, protective equipment and emergency procedures

No special precautions necessary. Extinguish sources of ignition nearby and downwind. Wear suitable personal protective clothing and equipment. Use antistatic tools. Avoid contact with skin and eyes. Ensure adequate ventilation.

Environmental precautions

Do not discharge into drains/surface waters/groundwater. In case of release into waterways, immediately notify the appropriate authorities downstream of the spill so they can determine if further action is needed.

Methods and material for containment and cleaning up

For residues: Rinse away with water.
Spills should be contained, solidified, and placed in suitable containers for disposal.

7. Handling and Storage

Precautions for safe handling

Ensure thorough ventilation of stores and work areas. Prevent contact with air/oxygen (formation of peroxide).

Protection against fire and explosion:

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Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Keep container tightly closed in a cool, well-ventilated place.

Storage stability:

Storage temperature: $\leq 35\text{ }^{\circ}\text{C}$

The stability data given is only valid when stored under oxygen free inert gases or in containers that are impermeable to oxygen.

8. Exposure Controls/Personal Protection

No substance specific occupational exposure limits known.

Advice on system design:

Provide local exhaust ventilation to maintain recommended P.E.L. Provide local exhaust ventilation to control vapours. Exhaust fans should be explosion proof.

Personal protective equipment

Respiratory protection:

Gas filter for gases/vapours of organic compounds (boiling point $>65\text{ }^{\circ}\text{C}$, e. g. EN 14387 Type A)

Hand protection:

Chemical resistant protective gloves, Consult with glove manufacturer for testing data.

Eye protection:

Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:

Avoid contact with the skin, eyes and clothing. Avoid inhalation of vapour. Wearing of closed work clothing is required additionally to the stated personal protection equipment. Handle in accordance with good industrial hygiene and safety practice. When using, do not eat, drink or smoke.

9. Physical and Chemical Properties

Physical state:	liquid
Form:	liquid
Odour:	ether-like
Odour threshold:	not determined
Colour:	colourless
pH value:	($20\text{ }^{\circ}\text{C}$) miscible, neutral
Melting point:	$-74.8\text{ }^{\circ}\text{C}$
Freezing point:	Literature data. $-70.4\text{ }^{\circ}\text{C}$

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Boiling point:	173.5 °C (1,013 hPa)	(other)
Flash point:	67 °C	(DIN 51758, closed cup)
Flammability:	Combustible liquid.	(derived from flash point)
Lower explosion limit:	1.1 %(V) For liquids not relevant for classification and labelling. The lower explosion point may be 5 - 15 °C below the flash point.	
Upper explosion limit:	10.6 %(V) For liquids not relevant for classification and labelling.	
Heat of Combustion:	30.04 kJ/g	
Autoignition:	232 °C	(DIN EN 14522)
Vapour pressure:	0.8 hPa (20 °C) Literature data.	(measured)
	1.17 hPa (25 °C) Literature data.	(measured)
Density:	0.9000 g/cm3 (20 °C, 1,013 hPa)	(DIN 51757)
Relative density:	0.9000 (20 °C)	
Relative vapour density:	4.08 (20 °C) Heavier than air.	(calculated)
Partitioning coefficient n-octanol/water (log Pow):	0.81 (25 °C) The data refers to the undissociated form of the substance.	(measured)
Self-ignition temperature:	20 °C Based on its structural properties the product is not classified as self-igniting.	
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.	
Viscosity, dynamic:	3.3 mPa.s (20 °C) The value was determined by calculation from the detected kinematic viscosity.	(calculated (from kinematic viscosity))
Viscosity, kinematic:	3.642 mm2/s (20 °C)	(Capillary viscometer)
Solubility in water:	900 g/l (20 °C) Literature data.	
Solubility (qualitative):	soluble solvent(s): organic solvents,	
Molecular weight:	118.18 g/mol	
Evaporation rate:	Value can be approximated from Henry's Law Constant or vapor pressure.	

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Particle characteristics

Particle size distribution: The substance / product is marketed or used in a non solid or granular form.

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated., When heated can give off ignitable vapours.

Corrosion to metals:

No corrosive effect on metal.

Oxidizing properties:

Based on its structural properties the product is not classified as oxidizing.

Formation of flammable gases:	Remarks:	Forms no flammable gases in the presence of water.
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Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

Reacts with light metals, with evolution of hydrogen. Reacts with strong oxidizing agents.

Conditions to avoid

No special precautions other than good housekeeping of chemicals.

Incompatible materials

strong oxidizing agents

Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

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Assessment of acute toxicity: Of moderate toxicity after single ingestion. The inhalation of a highly enriched/saturated vapor-air-mixture represents an unlikely acute hazard. Virtually nontoxic after a single skin contact.

Information on: 2-butoxyethanol

Assessment of acute toxicity: Of moderate toxicity after single ingestion. The inhalation of a highly enriched/saturated vapor-air-mixture represents an unlikely acute hazard. Virtually nontoxic after a single skin contact.

Oral

Type of value: LD50
Species: guinea pig
Value: 1,200 mg/kg (similar to OECD guideline 401)

Inhalation

Type of value: LC0
Species: guinea pig
Value: > 2.25 mg/l (similar to OECD guideline 403)
Exposure time: 4 h
The vapour was tested.
No mortality was observed. The European Union (EU) has classified this substance as 'toxic' (Cat. 3).

Dermal

Type of value: LD50
Species: guinea pig
Value: > 2,000 mg/kg (OECD Guideline 402)

Assessment other acute effects

Assessment of STOT single:
Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Irritation / corrosion

Assessment of irritating effects: Eye contact causes irritation. Skin contact causes irritation.

Skin

Species: rabbit
Result: Irritant.
Method: BASF-Test

Eye

Species: rabbit
Result: Irritant.
Method: OECD Guideline 405

Sensitization

Assessment of sensitization: Skin sensitizing effects were not observed in animal studies.

Guinea pig maximization test

Species: guinea pig
Result: Non-sensitizing.
Method: OECD Guideline 406

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Aspiration Hazard
not applicable

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: Damages blood cells. Due to the species specific mode of action, the effects are not expected to occur in humans.

Genetic toxicity

Assessment of mutagenicity: The substance was not mutagenic in bacteria. The substance was not mutagenic in mammalian cell culture. The substance was not mutagenic in studies with mammals.

Carcinogenicity

Assessment of carcinogenicity: Indication of possible carcinogenic effect in animal tests. A clear indication of an increased risk of cancer in humans has so far not been shown. IARC Group 3 (not classifiable as to human carcinogenicity).

Reproductive toxicity

Assessment of reproduction toxicity: The results of animal studies gave no indication of a fertility impairing effect.

Teratogenicity

Assessment of teratogenicity: In animal studies the substance did not cause malformations.

Other Information

Skin resorption hazard.

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. Based on long-term (chronic) toxicity study data, the product is very likely not harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish

LC50 (96 h) 1,474 mg/l, Oncorhynchus mykiss (OECD Guideline 203, static)
Nominal concentration. Literature data.

Aquatic invertebrates

EC50 (48 h) 1,550 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)
Nominal concentration. Literature data.

Aquatic plants

EC50 (72 h) 1,840 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static)
Nominal concentration. Literature data.

Chronic toxicity to fish

No observed effect concentration (21 d) > 100 mg/l, Brachydanio rerio (OECD Guideline 204, semistatic)
Nominal concentration. Literature data. Limit concentration test only (LIMIT test).

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Chronic toxicity to aquatic invertebrates

No observed effect concentration (21 d) 100 mg/l, Daphnia magna (OECD Guideline 211, semistatic)
Nominal concentration. Literature data.

Assessment of terrestrial toxicity

No data available concerning terrestrial toxicity.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

DIN 38412 Part 8 static
bacterium/Toxic limit concentration (16 h): > 700 mg/l
Nominal concentration. Literature data.

Persistence and degradability

Assessment biodegradation and elimination (H₂O)

Readily biodegradable (according to OECD criteria).

Elimination information

90 % CO₂ formation relative to the theoretical value (28 d) (OECD 301B; ISO 9439; 92/69/EWG, C.4-C) (aerobic, activated sludge)

Assessment of stability in water

Substance is readily biodegradable, therefore hydrolysis is not expected to be relevant.

Bioaccumulative potential

Assessment bioaccumulation potential

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

Bioaccumulation potential

No data available.

Mobility in soil

Assessment transport between environmental compartments

The substance will not evaporate into the atmosphere from the water surface.
Adsorption to solid soil phase is not expected.

Additional information

Adsorbable organically-bound halogen(AOX):
This product contains no organically-bound halogen.

13. Disposal considerations

Waste disposal of substance:

Dispose of in accordance with national, state and local regulations. Do not incinerate closed containers. Do not discharge into drains/surface waters/groundwater.

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Container disposal:

WARNING: Empty containers may still contain hazardous residue. Do not reuse containers without commercial reconditioning.

14. Transport Information

Land transport

TDG

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations

Not applicable

NFPA Hazard codes:

Health: 2 Fire: 2 Reactivity: 0 Special:

HMIS III rating

Health: 2 $\frac{2}{2}$ Flammability: 2 Physical hazard: 0

Assessment of the hazard classes according to UN GHS criteria (most recent version):

Acute Tox.	4 (oral)	Acute toxicity
Eye Irrit.	2A	Eye irritation
Skin Irrit.	2	Skin irritation
Flam. Liq.	4	Flammable liquids

16. Other Information

SDS Prepared by:

BASF NA Product Regulations
SDS Prepared on: 2025/06/30

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our

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operations on society and the environment during production, storage, transport, use and disposal of our products.

This information is considered accurate but is not exhaustive and shall only be used as a guideline based on current knowledge of the chemical substance or mixture. Safety precautions suitable for the product must be applied.

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