

Butanediol

Part No. RXSOL-81-3207-200 — Generated 28 Sep 2026

1. Product and Company Identification

Product Name	Butanediol
Part Number	RXSOL-81-3207-200

Company Details:....

RX MARINE INTERNATIONAL
105, A wing , BSEL , TECH PARK.
VASHI ,NEW BOMBAY 400703 INDIA

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2. Composition / informationon ingredients

Substances

Formula	$C_4H_{10}O_2$	
Molecular weight	90,12 g/mol	
CAS-No.	110-63-4	
EC-No.	203-786-5	
Component	Classification	Concentration
Butane-1,4-diol		
CAS-No.	110-63-4	Acute Tox. 4; STOT SE 3;
EC-No	203-786-5	H302, H336

= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

3. Hazards Identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008	Acute toxicity, Oral (Category 4), H302 Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336 For the full text of the H-Statements mentioned in this Section, see Section 16.
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Label elements

Signal Word	Warning
Hazard Statements	H302 Harmful if swallowed. H336 May cause drowsiness or dizziness.

Precautionary Statements	P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P301 + P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
Supplemental Hazard Statements	None
Other hazards	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

4. First Aid Measures

Description of first aid measures

General advice	Show this material safety data sheet to the doctor in attendance.
If inhaled	After inhalation: fresh air. Call in physician.
In case of skin contact	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.
In case of eye contact	After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.
If swallowed	After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.
Most important symptoms and effects, both acute and delayed	The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
Indication of any immediate medical attention and special treatment needed	No data available

5. Fire-fighting Measures

Extinguishing media

Suitable extinguishing media	Water Foam Carbon dioxide (CO2) Dry powder
Unsuitable extinguishing media	For this substance/mixture no limitations of extinguishing agents are given.
Special hazards arising from the substance or mixture	Carbon oxides Combustible. Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air on intense heating. Development of hazardous combustion gases or vapours possible in the event of fire
Advice for firefighters	In the event of fire, wear self-contained breathing apparatus.
Further information	Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.
Environmental precautions	Do not let product enter drains.

Methods and materials for containment and cleaning up	Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.
Reference to other sections	For disposal see section 13.

7. Handling and Storage

Precautions for safe handling

Advice on safe handling	Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.
Hygiene measures	Change contaminated clothing. Wash hands after working with substance. For precautions see section 2.2.
Conditions for safe storage, including any incompatibilities	
Storage conditions	Tightly closed. Recommended storage temperature see product label.
Storage stability	Recommended storage temperature 2 - 8 °C
Storage class	Storage class (TRGS 510): 10: Combustible liquids
Specific end use(s)	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. Exposure controls and personal protection

Control parameters

Ingredients with workplace control parameters

Derived No Effect Level (DNEL)

Application Area	Routes of exposure	Health effect	Value
Workers	Skin contact	Long-term systemic effects	19mg/kg BW/d
Workers	Inhalation	Long-term systemic effects	136 mg/m ³

Predicted No Effect Concentration (PNEC)

Compartment	Value
Soil	0,244 mg/kg
Sea water	0,0813 mg/l
Fresh water	0,813 mg/l
Sea sediment	0,361 mg/kg
Fresh water sediment	3,61 mg/kg
Onsite sewage treatment plant	1554 mg/l
Aquatic intermittent release	8,13 mg/l

Exposure controls

Personal protective equipment

Eye/face protection	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles
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Skin protection	This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
	Full contact
	Material: Nitrile rubber
	Minimum layer thickness: 0,11 mm
Skin protection	Break through time: 480 min
	Material tested:KCL 741 Dermatrill® L
	This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
	Splash contact
Skin protection	Material: Nitrile rubber
	Minimum layer thickness: 0,11 mm
	Break through time: 480 min
	Material tested:KCL 741 Dermatrill® L
Body Protection	Protective clothing.
Respiratory protection	Required when vapours/aerosols are generated.Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.
	Recommended Filter type: Filter type ABEK
	The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.
	These measures have to be properly documented.
Control of environmental exposure	Do not let product enter drains. Risk of explosion.

9. Physical and chemical properties

Physical state	Liquid
Colour	Colorless
Odor	No data available
Melting point/freezing point	Melting point/range: 16 °C
Initial boiling point and boiling range	230 °C at 1.013 h Pa
	120 - 122 °C at 13 h Pa
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Flash point	134 °C - closed cup
Autoignition temperature	385 °C
	at 1.013 h Pa
Decomposition temperature	No data available
pH	No data available
Viscosity	Viscosity, kinematic: 83,2 mm ² /s at 20 °C
	Viscosity, dynamic: 84,9 mPa.s at 20 °C
Water solubility	100 g/l at 25 °C - OECD Test Guideline 105- completely miscible
Partition coefficient: n-octanol/water	Log Pow: -0,88 at 25 °C - OECD Test Guideline 107
Vapor pressure	0,019 hPa at 25 °C - OECD Test Guideline 104

Density	1,014 g/cm ³
Relative density	No data available
Relative vapor density	No data available
Particle characteristics	No data available
Explosive properties	No data available
Oxidizing properties	None
Other safety information	
Dissociation constant	14,5
Relative vapor density	3,11 - (Air = 1.0)

10. Stability and reactivity

Reactivity	Forms explosive mixtures with air on intense heating. A range from approx. 15 Kelvin below the flash point is to be rated as critical.
Chemical stability	The product is chemically stable under standard ambient conditions (room temperature)
Possibility of hazardous reactions	No data available
Conditions to avoid	Strong heating.
Incompatible materials	Strong oxidizing agents, Acid chlorides, Acid anhydrides, Reducing agents
Hazardous decomposition products	In the event of fire: see section 5

11. Toxicological information

Information on toxicological effects

Acute toxicity	LD50 Oral - Rat - male and female - 1.500 mg/kg LC50 Inhalation - Rat - male and female - 4 h - > 5,1 mg/l - aerosol (OECD Test Guideline 403) LD50 Dermal - Rat - male and female - > 5.000 mg/kg
Skin corrosion/irritation	Skin - Rabbit Result: No skin irritation - 24 h
Serious eye damage/eye irritation	Eyes - Rabbit Result: No eye irritation
Respiratory or skin sensitization	Maximization Test - Guinea pig Result: Does not cause skin sensitization.
Germ cell mutagenicity	Test Type: In vitro mammalian cell gene mutation test Test system: Chinese hamster ovary cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative
Carcinogenicity	No data available
Reproductive toxicity	No data available
Specific target organ toxicity-single exposure)	May cause drowsiness or dizziness.
Specific target organ toxicity-repeated exposure)	No data available
Aspiration hazard	No data available

Additional Information

Endocrine disrupting properties Product

Assessment	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Repeated dose toxicity - Rat - male and female - Oral - NOAEL (No observed adverse effect level) - 50 mg/kg - LOAEL (Lowest observed adverse effect level) - 500 mg/kg To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
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12. Ecological information

Persistence and degradability	No data available
Toxicity to fish	Static test LC50 - Oncorhynchus mykiss (rainbow trout) - 75 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	Static test EC50 - Daphnia magna (Water flea) - 42,81 mg/l - 48 h (OECD Test Guideline 202) Remarks: (in analogy to similar products) The value is given in analogy to the following substances: maleic acid
Toxicity	Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 1.520 mg/l - 96 h
Toxicity to bacteria	EC10 - Bacteria - 14 mg/l - 72 h Remarks: (Lit.) EC5 - E.coli - 15.000 mg/l Remarks: (Lit.) (maximum permissible toxic concentration)
Toxicity to algae	Static test ErC50 - Pseudokirchneriella subcapitata (green algae) - 74,35 mg/l - 72 h (OECD Test Guideline 201) Remarks: (in analogy to similar products) The value is given in analogy to the following substances: maleic acid
Products Biodegradation	The methods for determining the biological degradability are not applicable to inorganic substances.
Mobility in soil	No data available
Results of PBT and vPvB assessment	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Endocrine disrupting properties	No data available
Other adverse effects	No data available .

13. Disposal considerations

Waste treatment methods

Product	See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.
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14. Transport information

UN number	ADR/RID:	IMDG:	IATA:
UN proper shipping name	ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods		
Transport hazard class(es)	ADR/RID:	IMDG:	IATA:
Packaging group	ADR/RID:	IMDG:	IATA:

Environmental hazards	ADR/RID: no IMDG Marine pollutant: no IATA: no
Special precautions for user	No data available
Further information	Not classified as dangerous in the meaning of transport regulations.

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture	This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.
Other regulations	Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable. Take note of Dir 94/33/EC on the protection of young people at work.
Chemical Safety Assessment	For this product a chemical safety assessment was not carried out

16. Other information

Other Information	The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Rx Marine International has been advised of the possibility of such damages. DISCLAIMER OF LIABILITY :The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.
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