

SAFETY DATA SHEET

Sodium Butyrate

1. PRODUCT

1.1 Product identifiers

Item	Information
Product Name	Sodium Butyrate
CAS No.	156-54-7
Formula	C4H7NaO2
Molecular Weight	110.09 g/mol
EC No.	205-857-6
Supplier	Tianjin Huge Roc Enterprises Co., Ltd
Address	1806, HUIJIN CENTRE, 65 DAGU BEILU, TIANJIN CHINA, 300041

1.2 Relevant identified uses

Identified uses: laboratory chemicals and synthesis of substances.

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):

- Skin irritation (Category 2), H315
- Eye irritation (Category 2A), H319
- Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

2.2 GHS label elements, including precautionary statements

Element	Information
Signal Word	Warning
Hazard Statements	H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation.
Precautionary Statements	P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P264 Wash skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/eye protection/face protection. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. P332 + P313 If skin irritation occurs: Get medical advice/attention. P337 + P313 If eye irritation persists: Get medical advice/attention. P362 Take off contaminated clothing and wash before reuse. P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. P501 Dispose of contents/container to an approved waste disposal plant.
HNOC	No data available

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	Classification	Concentration
Sodium butyrate	Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3; H315, H319, H335	<= 100%

4. FIRST AID MEASURES

4.1 Description of first aid measures

Route	Procedure
General Advice	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of

	dangerous area.
If Inhaled	Move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
Skin Contact	Wash off with soap and plenty of water. Consult a physician.
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If Swallowed	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling and/or in Section 11.

4.3 Indication of immediate medical attention and special treatment needed

No data available.

5. FIREFIGHTING MEASURES

Item	Information
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special hazards	No data available.
Advice for firefighters	Wear self-contained breathing apparatus for firefighting if necessary.
Further information	No data available.

6. ACCIDENTAL RELEASE MEASURES

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions: do not let product enter drains.

Methods and materials for containment and cleaning up: pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Reference to other sections: for disposal see Section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. Provide appropriate exhaust ventilation at places where dust is formed.

7.2 Conditions for safe storage

Handle under argon. Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: 2 - 8 °C. Moisture sensitive. Hygroscopic. Stench. Air sensitive. Keep in a dry place.

7.3 Specific end uses

Apart from the uses mentioned in Section 1.2, no other specific uses are stipulated.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Control / PPE	Requirement
Engineering Controls	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.
Eye / Face Protection	Safety glasses with side-shields conforming to EN166. Use approved eye protection under appropriate standards such as NIOSH (US) or EN166 (EU).
Skin Protection	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique to avoid skin contact. Wash and dry hands.
Glove Material	Nitrile rubber; minimum layer thickness 0.11 mm; breakthrough time 480 min. Material tested: Dermatril (KCL 740 / Aldrich Z677272, Size M).
Body Protection	Impervious clothing. Select protective equipment according to the concentration and amount of the dangerous substance at the workplace.
Respiratory Protection	For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges.

Environmental Exposure	Do not let product enter drains.
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9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Property	Result
Appearance	Form: powder; Colour: white
Odour	Unpleasant
Odour Threshold	No data available
pH	No data available
Melting point/freezing point	250 - 253 °C (482 - 487 °F)
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Water solubility	No data available
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

9.2 Other safety information

No data available.

10. STABILITY AND REACTIVITY

Item	Information
Reactivity	No data available.
Chemical Stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	No data available.
Conditions to Avoid	No data available.
Incompatible Materials	Strong oxidizing agents.
Hazardous Decomposition Products	Hazardous decomposition products formed under fire conditions: carbon oxides and sodium oxides. Other decomposition products: no data available.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Endpoint	Information
Acute Toxicity	No data available. Inhalation: no data available. Dermal: no data available.
Skin Corrosion / Irritation	No data available.
Serious Eye Damage / Eye Irritation	No data available.
Respiratory or Skin Sensitisation	No data available.
Germ Cell Mutagenicity	No data available.
Carcinogenicity	IARC, NTP and OSHA: no component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen.
Reproductive Toxicity	No data available.
STOT - Single Exposure	Inhalation: may cause respiratory irritation.
STOT - Repeated Exposure	No data available.
Aspiration Hazard	No data available.
Additional Information	RTECS: ET6400000. Possible symptoms include burning sensation, cough, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting. The chemical, physical and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Endpoint	Result
Toxicity to fish	LC50 - Lepomis macrochirus - 5,000 mg/l - 24 h
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 1,950 mg/l - 24 h
Toxicity to algae	No data available
Toxicity to bacteria	No data available

Persistence and degradability: no data available. Bioaccumulative potential: no data available. Mobility in soil: no data available.

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted. Other adverse effects: no data available.

13. DISPOSAL CONSIDERATIONS

Item	Waste Treatment Method
Product	Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Contaminated Packaging	Dispose of as unused product.

14. TRANSPORT INFORMATION

Regulation	Classification
DOT (US)	Not dangerous goods
IMDG	Not dangerous goods
IATA	Not dangerous goods

15. REGULATORY INFORMATION

Regulation	Information
SARA 302 Components	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components	This material does not contain chemical components with known CAS numbers exceeding threshold reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards	Acute Health Hazard, Chronic Health Hazard.
Massachusetts Right To Know Components	No components are subject to the Massachusetts Right To Know Act.
Pennsylvania Right To Know Components	Sodium butyrate; CAS No. 156-54-7.
New Jersey Right To Know Components	Sodium butyrate; CAS No. 156-54-7.
California Prop. 65 Components	This product does not contain chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Full text of H-Statements referred to under Sections 2 and 3

Code / Rating	Description
Eye Irrit.	Eye irritation
Skin Irrit.	Skin irritation
STOT SE	Specific target organ toxicity - single exposure
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
HMIS Rating	Health hazard: 2; Chronic Health Hazard: *; Flammability: 0; Physical Hazard: 0
NFPA Rating	Health hazard: 2; Fire Hazard: 0; Reactivity Hazard: 0

The information contained in this safety data sheet is believed to be correct and is provided as guidance for safe handling, use, processing, storage, transportation, disposal and release.