



山东三元生物科技股份有限公司  
Shandong SanYuan Biotechnology Co., Ltd.

Address: No.89 Zhangfu Road, Binbei Binzhou, Shandong, China

Email: [bsanyuan@bsanyuan.com](mailto:bsanyuan@bsanyuan.com) [www.sanyuanbz.com](http://www.sanyuanbz.com)

## Material Safety Date Sheet

### Organic Erythritol MSDS

Issue Date: 2019/7/17

Version: 2019

#### Section 1: Identification

Common Name: Organic meso-Erythritol

Synonym: 1,2,3,4-Butanetetrol

Manufacturer Name: Shandong Sanyuan Biotechnology Co.,Ltd

Manufacturer Address: No 89,Zhangfu Road,Binbei,Binzhou City,Shandong Province,China

Post Code: 256600

Telephone: +86-543-3529851

Fax No: +86-543-3529850

Emergency No: +86-543-3529851

Recommended Use: As a sweetener or ingredient in food or beverage processing.

#### Section 2: Hazards Identification

Emergency Overview

OSHA Hazards

No known OSHA hazards

Not a dangerous substance according to GHS

HMIS Classification

Healty Hazard:0

Flammability:0

Physical hazards:0

NFPA Rating

Healty Hazard:0

Fire:0

Reactivity Hazard:0

Potential Health Effects





山东三元生物科技股份有限公司  
Shandong SanYuan Biotechnology Co., Ltd.

Address: No.89 Zhangfu Road, Binbei Binzhou, Shandong, China

Email: [bsanyuan@bsanyuan.com](mailto:bsanyuan@bsanyuan.com) [www.sanyuanbz.com](http://www.sanyuanbz.com)

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.  
Skin: May be harmful if absorbed through skin. May cause skin irritation.  
Eyes: May cause eye irritation.  
Ingestion: May be harmful if swallowed.

### Section 3: Composition/Information on Ingredients

Composition:

Synonym: 1,2,3,4-Butanetetrol

Meso-1,2,3,4-Tetrahydroxybutan

Erythritol

EC-NO: 205-737-3

Common Name	Cas No:	Molecular Weight	Formula	%by Weight
Meso-Erythritol	149-32-6	122.12	C <sub>4</sub> H <sub>10</sub> O <sub>4</sub>	100

Toxicological Data on Ingredients: Not Applicable.

### Section 4: First-Aid Measures

Eye Contact: Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used.

Skin Contact: After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water maybe used. Cover the irritated skin with emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

Serious Skin Contact: Not Available.

Inhalation: Allow the victim to rest in a well ventilated area. immediate medical attention.

Serious Inhalation: Not Available.

Ingestion: Do not include vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Serious Ingestion: Not Available.





# 山东三元生物科技股份有限公司 Shandong SanYuan Biotechnology Co., Ltd.

Address: No.89 Zhangfu Road, Binbei Binzhou, Shandong, China

Email: [bzsanyuan@bzsanyuan.com](mailto:bzsanyuan@bzsanyuan.com) [www.sanyuanbz.com](http://www.sanyuanbz.com)

## Section 5: Fire-Fighting Measures

Flammability of the Product : May be combustible at high temperature

Auto-Ignition Temperature: Not Available.

Flash Points : Not Available.

Flammable Limits: Not Available.

Products of Combustion: These products are carbon oxides( CO,CO<sub>2</sub>)

Fire Hazards in Presence of Various Substances: Not Available.

Explosion Hazards in presence of Various Substances: Risks of explosion of the product in presence of mechanical impact; Not Available.

Fire Fighting Media and Instruction: Small Fire: Use Dry chemical powder.

Large Fire: Use Water spray, fog or foam. Do not

use water jet.

Special Remarks on Fire Hazards: Not Available.

Special Remarks on Explosion Hazards: Not Available.

## Section 6: Accidental Release Measures

Small Spill: Use appropriate tools to put the spilled solid in a convenient waster disposal container.Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill: Use a shovel to put the material into a convenient waster disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

## Section 7: Handling and Storage.

Precautions: Keep away from heat . Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe dust.

Storage: Keep container dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool , well-ventilated place. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

## Section 8: Exposure Controls and Personal Protection





山东三元生物科技股份有限公司  
Shandong SanYuan Biotechnology Co., Ltd.

Address: No.89 Zhangfu Road, Binbei Binzhou, Shandong, China

Email: [bsanyuan@bsanyuan.com](mailto:bsanyuan@bsanyuan.com) [www.sanyuanbz.com](http://www.sanyuanbz.com)

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory Protection

Respiratory protection is not required. Where protection from nuisance levels to dusts are desired, use type N95(US) or Type P1(EN143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH(US) or CEN(EU).

Hand Protection

Handle with gloves. Gloves must be inspected prior to use. Use proper gloves removal technique ( without touching glove's outer surface) to avoid skin contact with this products. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye Protection: Use equipment for eye protection tested and approved under

appropriate government standards such as NIOSH(US) or EN166(EU).

Skin and Body Protection: Choose body protection in relation to its type. To the concentration and amount of dangerous substances, and to the specific workplace, the type of protective equipment must be selected according to the concentration and amount of dangerous substance at the specific workplace.

Hygiene measures: General industrial hygiene practice.

## Section 9: Physical and Chemical Properties

Physical state and appearance: Solid

Odor: Not Available

Taste: Not Available

Molecular Weight: 122.12/mole

Color: Not Available.

PH(1% soln/water): Not Available.

Boiling Point: 330°C (626°F)

Melting Point: 119°C-123°C.

Critical Temperature: Not Available

Specific Gravity: Not Available

Vapor Pressure: Not Available

Vapor Density: Not Available

Volatility: Not Available

Odor Threshold: Not Available





山东三元生物科技股份有限公司  
Shandong SanYuan Biotechnology Co., Ltd.

Address: No.89 Zhangfu Road, Binbei Binzhou, Shandong, China

Email: [bsanyuan@bsanyuan.com](mailto:bsanyuan@bsanyuan.com) [www.sanyuanbz.com](http://www.sanyuanbz.com)

Water/Oil Dist.Coeff: Not Available  
Lonicity(in water): Not Available  
Dispersion Properties: See solubility in water.  
Solubility: Easily soluble in cold water.

### Section 10: Stability and Reactivity.

Chemical Stability: Stable under recommended storage conditions.  
Possibility of hazardous reactions: no date available.  
Conditions to avoid: no date available.  
Materials to avoid: Strong oxidizing agents, Strong bases.  
Hazardous decomposition products: Hazardous decomposition products formed under fire conditions-Carbon oxide.

### Section 11: Toxicological Information

Acute toxicity

Oral LD50: no date available.  
Inhalation LC50: no date available  
Dermal LD50: no date available  
Other Information on acute toxicity:LD50 Intraperitoneal-mouse-7000 mg/kg  
Skin corrosion/irritation: no date available  
Serious eye damage/eye irritation: no date available  
Respiratory or skin sensitization: no date available  
Germ cell mutagenicity: no date available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.  
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.  
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.  
OSHA: No component of this product present at levels greater than or equal to 0.1%





山东三元生物科技股份有限公司  
Shandong SanYuan Biotechnology Co., Ltd.

Address: No.89 Zhangfu Road, Binbei Binzhou, Shandong, China

Email: [bzsanyuan@bzsanyuan.com](mailto:bzsanyuan@bzsanyuan.com) [www.sanyuanbz.com](http://www.sanyuanbz.com)

is identified as a known or anticipated carcinogen by OSHA.

Reproductive toxicity: no date available.

Teratogenicity: no date available.

Specific target organ toxicity-single exposure ( Globally Harmonized System): no date available.

Specific target organ toxicity-repeated exposure ( Globally Harmonized System): no date available.

Aspiration hazard: no date available.

Potential health effects:

Inhalation: Maybe harmful if inhaled. May cause respiratory tract irritation.

Ingestion: Maybe harmful if swallowed.

Skin: Maybe harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eyes irritation.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical ,physical and toxicological properties have not been thoroughly investigated .

Synergistic effects: no date available.

Additional Information: RTECS: KF2000000

### Section 12: Ecological Information (non-mandatory)

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradations: Possibly hazardous short term degradation products are not likely. However long term degradation products may arise.

Toxicity of the Products of Biodegradation: Not available.

Special Remarks on the Products of Biodegradation: Not available.

### Section 13: Disposal Consideration (non-mandatory)

Disposal can be treated as a common waste for disposal or dumped into a landfill site in accordance with relevant authority guidelines.

Note BOD load of sugar solutions in waste water streams.

Personal precautions should be observed.





**山东三元生物科技股份有限公司**  
**Shandong SanYuan Biotechnology Co., Ltd.**

Address: No.89 Zhangfu Road, Binbei Binzhou, Shandong, China

Email: [bsanyuan@bsanyuan.com](mailto:bsanyuan@bsanyuan.com) [www.sanyuanbz.com](http://www.sanyuanbz.com)

**Section 14: Transport Information (non-mandatory)**

General Information : As non-hazardous chemical.

Transport Requirement: Avoid toxic or other harmful materials. No special transport requirement are necessary .

UN Number: None allocated.

Class: None allocated.

Subsidiary Risk 1: None allocated.

Packaging Group: None allocated.

Hazchem code : None allocated.

Incompatibilities: None.

Proper Shipping Name: None allocated.

Marine Pollutant: No.

According to IMDG/IMO, it is not dangerous cargo.

**Section 15: Regulatory Information ( non-mandatory)**

OSHA Hazards. No known OSHA hazards.

DSL Status: All components of this product are on the Canadian DSL list.

SARA 302 Components

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA TitleIII, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with know CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA TitleIII, Section 313.

SARA 311/312 Hazards

No SARA Hazards.

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

meso-Erythritol CAS NO: 149-32-6. Revision Date:20180101

New Jersey Right To Know Components

meso-Erythritol CAS NO: 149-32-6. Revision Date:20180101





山东三元生物科技股份有限公司  
Shandong SanYuan Biotechnology Co., Ltd.

Address: No.89 Zhangfu Road, Binbei Binzhou, Shandong, China

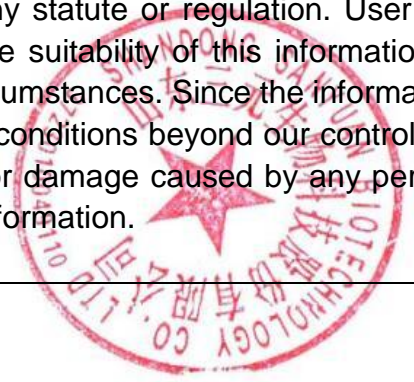
Email: [bsanyuan@bsanyuan.com](mailto:bsanyuan@bsanyuan.com) [www.sanyuanbz.com](http://www.sanyuanbz.com)

### Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

Whilst the information contained in this document is based on data which to the best of our knowledge, was accurate and reliable at the time of preparation. No responsibility can be accepted by us for error and omissions. The provision of this information should not be construed as a recommendation to use any of our products in violation of any patent rights or in breach of any statute or regulation. User are advised to make their own determination as to the suitability of this information in relation to their particular purposes and specific circumstances. Since the information contained in this document may be applied under conditions beyond our control, no responsibility can be accepted by us or any loss or damage caused by any person acting or refraining from action as a result of this information.



Sanyuan Bio

