



SHANDONG SANYUAN BIOTECHNOLOGY CO.,LTD

NO.89,ZHANGFU ROAD,BINBEI,BINZHOU CITY,SHANDONG PROVINCE,CHINA

www.bzsanyuan.com

Material Safety Data Sheet

meso-Erythritol MSDS

Version III - 2017
Valid for five years

Section 1: Identification

★Common Name:meso-Erythritol
★Synonym:1,2,3,4-Butanetetrol
★Manufacturer Name:Shandong Sanyuan Biotechnology Co.,Ltd
Address:No.89,Zhangfu Road,Binbei,Binzhou City,Shandong Province,China
Post Code:256600
Telephone:+86-0543-2223117
Emergency No.:+86-0543-2292798
★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
Health Hazard: 0
Flammability: 0
Physical hazards: 0
★NFPA Rating
Health Hazard: 0
Fire: 0
Reactivity Hazard: 0
★Potential Health Effects
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 irritaiton
Ingestion May be harmful if swallowed

Section 3: Composition/Information on Ingredients

★Composition
Synonym:1,2,3,4-Butanetetrol
meso-1,2,3,4-Tetrahydroxybutane
i-Erythritol
EC-NO:205-737-3

Common Name	Cas No:	Molecular Weight	Formula	%by Weight
meso-Erythritol	149-32-6	122.12	C4H10O4	100

★Toxicological Data on Ingredients:Not Applicable

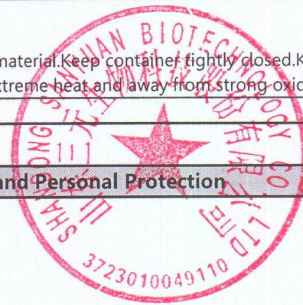
Section 4:First-Aid Measures	
★Eye Contact	Immediately flush eyes with running water for at least 15 minutes,keeping eyelids open.Cold water may be used
★Skin Contact	After contact with skin,wash immediately with plenty of water.Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap.Be particularly careful to clean folds,crevices,creases and groin.Cold water maybe used.Cover the irritated skin with an 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.Seek immediate medical attention
★Serious Inhalation:	Not Available
★Ingestion	Do not induce 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

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,CO2)
★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 Risks of explosion of the product in presence of static discharge:Not Available
★Fire Fighting Media and Instructions	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 waste disposal container.Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary sysytem

Section 7:Handling and Storage	
★Precautions:	Keep away from heat.Keep away from sources of ignition.Empty contianers 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.Gournd 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	
Contains no substances with occupational exposure limit values	
★Personal protective equipment	
Respiratory Protection	Respiratory protection is not required.Where protecton from nuisance levels fo 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 glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. 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 work-place, the type of protective equipment must be selected according to the concentration and amount of the 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: 122.12g/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 applicable

Vapor Density: Not available

Volatility: Not available

Odor Threshold: Not available

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 data available

★**Conditions to avoid:** no data 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 data available

Inhalation LC50: no data available

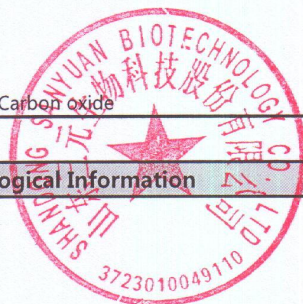
Dermal LD50: no data available

Other information on acute toxicity: LD50 Intraperitoneal-mouse-7000 mg/kg

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitization: no data available



Germ cell mutagenicity:no data 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% is identified as a known or anticipated carcinogen by OSHA

Reproductive toxicity:no data available

Teratogenicity:no data available

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

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

Aspiration hazard:no data 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 data available

Additional Informaiton: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

Section 14:Transport Information(non-mandatory)

General Information: As non-hazardous chemical.

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

UN number: None allocated

Class: None allocated

IMDG Code/Class : Not Hazardous

Subsidiary Risk 1: None allocated

ICAO/IATA Air Class : Non- Hazardous

Packaging Group: None allocated

RID/ ADR Class : Non-Hazardous

Hazchem code: None allocated

ADNR Class : Non-Hazardous

Incompatibilities: None

Proper Shipping Name: None allocated

Marine Pollutant: No

Section 15:Regulatory Informaiton(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 Title III,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 Title III,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

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

New Jersey Right To Know Components

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

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 errors 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. Users 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