

**SAFETY DATA SHEET**

according to Regulation (EC) No.1907/2006

Version 5.0 Revision Date 05.01.2017

**Material Safety Data Sheet  
Erythrulose msds****Section 1: Identification of the Substance/Mixture and of the Company/Undertaking****1.1 Product identifiers**

<b>Product name</b>	:	L-(+)-Erythrulose
<b>INCI Name</b>	:	Erythrulose
<b>Product Number</b>	:	C01001B
<b>Brand</b>	:	Erytan
<b>REACH No.</b>	:	A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.
<b>CAS-No.</b>	:	533-50-6

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

<b>Identified uses</b>	:	Colorant or self tanning agent in personal care products, Manufacture of substances
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**1.3 Details of the supplier of the safety data sheet**

<b>Company</b>	:	M.C.Biotec Inc. 47-505, Demin Huayuan Nantong, China
<b>Tel</b>	:	+86-139-13923033
<b>Fax</b>	:	+86-10-80115555 ext 441505
<b>E-mail address</b>	:	<a href="mailto:mc@mcbiotec.com">mc@mcbiotec.com</a>
<b>Website</b>	:	<a href="http://www.mcbiotec.com">www.mcbiotec.com</a>

**1.4 Emergency telephone number**

<b>Emergency Phone #</b>	:	+86-139-13923033
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**Section 2: Hazards Identification****2.1 Classification of the substance or mixture**

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

This substance is not classified as dangerous according to Directive 67/548/EEC.

## 2.2 Label elements

The product does not need to be labelled in accordance with EC directives or respective national laws.

## 2.3 Other hazards - none

### Section 3: Composition and Information on Ingredients

#### 3.1 Substances

Synonyms : L-Glycero-2-tetrolulose  
S-1,3,4-Trihydroxy-2-butanone

Formula : C<sub>4</sub>H<sub>8</sub>O<sub>4</sub>

Molecular Weight : 120.1 g/mol

No components need to be disclosed according to the applicable regulations.

A) Ingredient	INCI Name	CAS No.	Classification	Amount*
As listed in the CTFA Dictionary	Erythrulose	533-50-6	---	A
B) Additives	INCI Name	CAS No.	Classification	Amount*
Solvent	Water	---	---	C
Preservative	None	---	---	---
Others (buffers, antioxidants, colorants)	None	---	---	---

# CTFA Dictionary

FDA-Code (A = > 50%, B = 25-50%, C = 10-25%, D = 5-10%, E = 1-5%, F = 0.1-1%, G = < 0.1%)

### Section 4: First Aid Measures

#### 4.1 Description of first aid measures

##### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

##### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

##### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

##### In case of eye contact

Flush eyes with water as a precaution.

##### 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 (see section 2.2) and/or in section 11

4.3	<b>Indication of any immediate medical attention and special treatment needed</b>
	No data available
<b>Section 5: Fire Fighting Measures</b>	
5.1	<b>Extinguishing media</b>
	<b>Suitable extinguishing media</b>
	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
5.2	<b>Special hazards arising from the substance or mixture</b>
	Carbon oxides
5.3	<b>Advice for firefighters</b>
	Wear self contained breathing apparatus for fire fighting if necessary.
5.4	<b>Further information</b>
	no data available
<b>Section 6: Accidental Release Measures</b>	
6.1	<b>Personal precautions, protective equipment and emergency procedures</b>
	Avoid breathing vapors, mist or gas.
	For personal protection see section 8.
6.2	<b>Environmental precautions</b>
	Do not let product enter drains.
6.3	<b>Methods and materials for containment and cleaning up</b>
	Keep in suitable, closed containers for disposal.
6.4	<b>Reference to other sections</b>
	For disposal see section 13.
<b>Section 7: Handling and Storage</b>	
7.1	<b>Precautions for safe handling</b>
	For precautions see section 2.2.
7.2	<b>Conditions for safe storage, including any incompatibilities</b>
	Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
	Containers which are opened must be carefully resealed and kept upright to prevent leakage.
	Hygroscopic. Store under inert gas.
7.3	<b>Specific end uses</b>
	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated
<b>Section 8: Exposure Controls/Personal Protection</b>	
8.1	<b>Control parameters</b>
	<b>Components with workplace control parameters</b>
	Contains no substances with occupational exposure limit values.

**Exposure Limits**

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Erythulose	none listed	none listed	none listed

**8.2 Exposure controls**

**Appropriate engineering controls**

General industrial hygiene practice.

**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).

**Skin 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.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Body Protection**

impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**

Do not let product enter drains.

**Section 9: Physical and Chemical Properties**

**9.1 Information on basic physical and chemical properties**

a) Appearance	Form: clear, viscous liquid Colour: light yellow
b) Odour	Almost odorless
c) Odour Threshold	no data available
d) pH	2.0 – 5.0 (in 50 % water)
e) Melting point/freezing point	no data available
f) Initial boiling point and boiling range	no data available
g) Flash point	110°C Method: closed cup

h)	Evaporation rate	no data available
i)	Flammability (solid, gas)	Not a highly flammable liquid
j)	Upper/lower flammability or explosive limits	no data available
k)	Vapour pressure	1243 Pa (at 20 - 25°C)
l)	Vapour density	no data available
m)	Relative density	1.391 g/cm <sup>3</sup>
n)	Water solubility	soluble
o)	Partition coefficient: noctanol/water	Log Pow = -1.822
p)	Autoignition temperature	no data available
q)	Decomposition temperature	no data available
r)	Viscosity	no data available
s)	Explosive properties	no data available
t)	Oxidizing properties	no data available
9.2	<b>Other safety information</b>	no data available
<b>Section 10: Stability and Reactivity</b>		
10.1	<b>Reactivity</b>	no data available
10.2	<b>Chemical stability</b>	Stable under recommended storage conditions.
10.3	<b>Possibility of hazardous reactions</b>	no data available
10.4	<b>Conditions to avoid</b>	no data available
10.5	<b>Incompatible materials</b>	Strong oxidizing agents
10.6	<b>Hazardous decomposition products</b>	Other decomposition products - no data available In the event of fire: see section 5
<b>Section 11: Toxicological Information</b>		
11.1	<b>Information on toxicological effects</b>	
	<b>Acute oral toxicity</b>	
	LD50 rat	Dose: >2000 mg/kg for 16% Erythrulose

**NOEL (Rat Oral)**

1000 mg/kg bw/day

**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 carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**

no data available

**Specific target organ toxicity - single exposure**

no data available

**Specific target organ toxicity - repeated exposure**

no data available

**Aspiration hazard**

no data available

**Potential health effects**

<b>Inhalation</b>	May be harmful if inhaled. Causes respiratory tract irritation.
<b>Ingestion</b>	May be harmful if swallowed.
<b>Skin</b>	May be harmful if absorbed through skin. Causes skin irritation.
<b>Eyes</b>	May cause eye irritation.

**Signs and Symptoms of Exposure**

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

**Additional Information**

RTECS: Not available

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

**Section 12: Ecological Information**

**12.1 Toxicity**

***Toxicity to daphnia and other aquatic invertebrates.***

Not toxic to daphnia

***Toxicity to algae***

Not toxic to freshwater algae

**12.2 Persistence and degradability**

Readily biodegradable.

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

no data available

**12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**

No data available

**Section 13: Disposal Considerations**

**13.1 Waste treatment methods**

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

**Section 14: Transport Information**

**14.1 UN number**

ADR/RID: -

IMDG: -

IATA: -

**14.2 UN proper shipping name**

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

**14.3 Transport hazard class(es)**

ADR/RID: -

IMDG: -

IATA: -

**14.4 Packaging group**

ADR/RID: -

IMDG: -

IATA: -

14.5 **Environmental hazards**

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

14.6 **Special precautions for user**

no data available

**Section 15: Regulatory Information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 **Safety, health and environmental regulations/legislation specific for the substance or mixture**

No data available

15.2 **Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out

**Section 16: Other Information****Other Special Considerations:** Not available.**Disclaimer**

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