Material Safety Data Sheet

Version 3.0 Revision Date 12/31/2008 Print Date 06/05/2009

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name : L-(+)-Erythrulose

Product Number : 56845 Brand : Sigma

Company : Sigma-Aldrich Canada, Ltd.

2149 Winston Park Drive OAKVILLE ON L6H 6J8

CANADA : +1 9058299500 +1 9058299292

Fax Emergency Phone # : 800-424-9300 2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : L-Glycero-2-tetrulose

S-1,3,4-Trihydroxy-2-butanone

L-Erythrulose 533-50-6 3. HAZARDS IDENTIFICATION

WHMIS Classification Not WHMIS controlled.

Telephone

0

1 Physical hazards: 0 Potential Health Effects

> Skin May be harmful if absorbed through skin. May cause skin irritation. May cause eye irritation. Eyes Ingestion May be harmful if swallowed.

110 °C (230 °F) - closed cup

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May be harmful if inhaled. May cause respiratory tract irritation.

riush eyes with water as a precaution.

In case of skin contact

Never give anything by mouth to an unconscious person. Rinse mouth with water.

5. FIRE-FIGHTING MEASURES

Ignition temperature no data available Suitable extinguishing media

Wear self contained breathing apparatus for fire fighting if necessary. 6. ACCIDENTAL RELEASE MEASURES

Special protective equipment for fire-fighters

Personal precautions

Environmental precautions Do not let product enter drains.

Methods for cleaning up

7. HANDLING AND STORAGE

Handling Normal measures for preventive fire protection.

Storage

resealed and kept upright to prevent leakage.

hygroscopic Store under inert gas.

Contains no substances with occupational exposure limit values. Personal protective equipment

Respiratory protection is not required. Where protection is desired, use multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate

government standards such as NIOSH (US) or CEN (EU). Hand protection

Respiratory protection

Hygiene measures General industrial hygiene practice.

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clear, viscous liquid

no data available

no data available

no data available

no data available

light yellow

9. PHYSICAL AND CHEMICAL PROPERTIES

Melting point Boiling point no data available 110 °C (230 °F) - closed cup

Flash point Ignition temperature

Lower explosion limit no data available Upper explosion limit no data available Density 1.391 g/cm3

Storage stability Stable under recommended storage conditions. Strong oxidizing agents Hazardous decomposition products Hazardous decomposition products formed under fire conditions. - Carbon oxides

no data available Sensitisation

Irritation and corrosion

no data available Chronic exposure

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

Potential Health Effects Inhalation

No component of this product present at levels greater than or equal to 0.1% is identified as

May be harmful if inhaled. May cause respiratory tract irritation.

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May be harmful if absorbed through skin. May cause skin irritation.

12. ECOLOGICAL INFORMATION Elimination information (persistence and degradability)

May cause eye irritation.

May be harmful if swallowed.

probable, possible or confirmed human carcinogen by IARC.

Ecotoxicity effects no data available Further information on ecology

Product Observe all federal, state, and local environmental regulations.

Contaminated packaging

Dispose of as unused product. 14. TRANSPORT INFORMATION

Not dangerous goods IATA

15. REGULATORY INFORMATION

533-50-6 WHMIS Classification Not WHMIS controlled. Not WHMIS controlled.

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Co., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

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Formula : C₄H₈O₄ Molecular Weight : 120.1 g/mol EC-No. Index-No. Concentration CAS-No.

Not WHMIS controlled.

HMIS Classification Health Hazard: Flammability:

4. FIRST AID MEASURES

Inhalation

If inhaled If breathed in, move person into fresh air. If not breathing give artificial respiration

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Wash off with soap and plenty of water. In case of eye contact

Flammable properties Flash point Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Avoid breathing vapors, mist or gas. Keep in suitable, closed containers for disposal.

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

For prolonged or repeated contact use protective gloves. Eye protection Safety glasses

Appearance Form Colour Safety data

рΗ

Water solubility

10. STABILITY AND REACTIVITY

Materials to avoid 11. TOXICOLOGICAL INFORMATION

> Acute toxicity no data available

Signs and Symptoms of Exposure

IARC:

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no data available

Skin Eyes

Ingestion

no data available 13. DISPOSAL CONSIDERATIONS

Not dangerous goods

Not dangerous goods

DOT (US)

This product contains the following components that are not on the Canadian DSL nor NDSL lists. L-Erythrulose

DSL Status

16. OTHER INFORMATION

Sigma-Aldrich Corporation

CAS-No.