Telephone

Fax

## Material Safety Data Sheet

Version 3.0 Revision Date 08/22/2009 Print Date 04/12/2010

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product name trans-β-Hydromuconic acid

Product Number H17856 Brand : Aldrich

: Sigma-Aldrich Canada, Ltd Company

> 2149 Winston Park Drive OAKVILLE ON L6H 6J8

CANADA : +19058299500 : +19058299292

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

: Dihydromuconic acid Synonyms trans-3-Hexenedioic acid

2-Butene-1,4-dicarboxylic acid Formula

: C6H8O4 : 144.13 g/mol

Molecular Weight CAS-No. EC-No.

Hex-3-enedioic acid 4436-74-2 224-648-0 3. HAZARDS IDENTIFICATION

Index-No.

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

Sigma-Aldrich Corporation

www.sigma-aldrich.com

#### WHMIS Classification Not WHMIS controlled.

HMIS Classification Health Hazard: 0

0

Not WHMIS controlled.

Concentration

Page 1 of

Page 2 of

Page 3 of

Flammability: Physical hazards:

0 Potential Health Effects Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion

Skin

May cause eye irritation. Eyes May be harmful if swallowed. 4. FIRST AID MEASURES

Aldrich - H17856

Wash off with soap and plenty of water.

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

In case of eye contact Flush eyes with water as a precaution.

In case of skin contact

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

5. FIRE-FIGHTING MEASURES

Flammable properties no data available Flash point

### Ignition temperature no data available

Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

#### Environmental precautions Do not let product enter drains.

Sweep up and shovel. Keep in suitable, closed containers for disposal. 7. HANDLING AND STORAGE

Handling

Storage

Methods for cleaning up

Personal precautions Avoid dust formation.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory protection

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

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95

www.sigma-aldrich.com

(US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Hand protection

For prolonged or repeated contact use protective gloves.

Keep container tightly closed in a dry and well-ventilated place.

#### Eye protection Safety glasses Hygiene measures

General industrial hygiene practice. Sigma-Aldrich Corporation Aldrich - H17856

crystalline

no data available

Hazardous decomposition products formed under fire conditions. - Carbon oxides

probable, possible or confirmed human carcinogen by IARC.

white

#### 195 - 196 °C (383 - 385 °F) - lit. Melting point Boiling point no data available

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Form

Colour

Safety data

no data available Ignition temperature Lower explosion limit no data available Upper explosion limit no data available

Water solubility no data available 10. STABILITY AND REACTIVITY Storage stability

Acute toxicity no data available

Irritation and corrosion no data available

11. TOXICOLOGICAL INFORMATION

Signs and Symptoms of Exposure To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Potential Health Effects May be harmful if inhaled. May cause respiratory tract irritation. Inhalation Skin May be harmful if absorbed through skin. May cause skin irritation.

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

Sigma-Aldrich Corporation

www.sigma-aldrich.com

12. ECOLOGICAL INFORMATION Elimination information (persistence and degradability)

no data available

no data available

### 13. DISPOSAL CONSIDERATIONS Product

Dispose of as unused product.

Contaminated packaging

# Not dangerous goods

DSL Status This product contains the following components listed on the Canadian NDSL list. All other components are on the

Canadian DSL list.

Not dangerous goods

CAS-No. Hex-3-enedioic acid 4436-74-2

# 16. OTHER INFORMATION

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.

Aldrich - H17856 www.sigma-aldrich.com

Flash point no data available

> Stable under recommended storage conditions. Materials to avoid Strong oxidizing agents

Hazardous decomposition products

Sensitisation no data available

Chronic exposure

IARC:

Aldrich - H17856

Eyes May cause eye irritation. Ingestion May be harmful if swallowed.

Ecotoxicity effects no data available Further information on ecology

Observe all federal, state, and local environmental regulations.

### 14. TRANSPORT INFORMATION DOT (US)

IMDG

Not dangerous goods

15. REGULATORY INFORMATION

WHMIS Classification Not WHMIS controlled.

Further information Copyright 2009 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

Sigma-Aldrich Corporation

Not WHMIS controlled.

Page 4 of