

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Dimethyl 3-methylglutaconate, mixture of *cis* and *trans*

Product Number : 186597

Brand : Aldrich

Product Use : For laboratory research purposes.

Supplier : Sigma-Aldrich  
3050 Spruce Street  
SAINT LOUIS MO 63103  
USA

Manufacturer : Sigma-Aldrich Corporation  
3050 Spruce St.  
St. Louis, Missouri 63103  
USA

Telephone : +18003255832

Fax : +18003255052

Emergency Phone # (For both supplier and manufacturer) : (314) 776-6555

Preparation Information : Sigma-Aldrich Corporation  
Product Safety - Americas Region  
1-800-521-8956

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

##### OSHA Hazards

No known OSHA hazards

Not a dangerous substance according to GHS.

#### HMIS Classification

Health hazard: 0

Flammability: 1

Physical hazards: 0

#### NFPA Rating

Health hazard: 0

Fire: 1

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 irritation.

**Ingestion** May be harmful if swallowed.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : C<sub>8</sub>H<sub>12</sub>O<sub>4</sub>

Molecular Weight : 172.18 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
<b>Dimethyl 3-methylpent-2-enedioate</b>			
52313-87-8	257-839-2	-	-

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#### 4. FIRST AID MEASURES

**If inhaled**

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

**In case of skin contact**

Wash off with soap and plenty of water.

**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.

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#### 5. FIRE-FIGHTING MEASURES

**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.

**Hazardous combustion products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides

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#### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions**

Avoid breathing vapors, mist or gas.

**Environmental precautions**

Do not let product enter drains.

**Methods and materials for containment and cleaning up**

Keep in suitable, closed containers for disposal.

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#### 7. HANDLING AND STORAGE

**Precautions for safe handling**

Normal measures for preventive fire protection.

**Conditions for safe storage**

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.

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#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

**Personal protective equipment****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).

**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 EN 166(EU).

**Skin and 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.

### Hygiene measures

General industrial hygiene practice.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form	liquid
Colour	colourless

### Safety data

pH	no data available
Melting/freezing point	no data available
Boiling point	109 - 110 °C (228 - 230 °F) at 16 hPa (12 mmHg) - lit.
Flash point	98 °C (208 °F) - closed cup
Ignition temperature	no data available
Autoignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapour pressure	no data available
Density	1.095 g/mL at 25 °C (77 °F)
Water solubility	no data available
Partition coefficient: n-octanol/water	no data available
Relative vapour density	no data available
Odour	no data available
Odour Threshold	no data available
Evaporation rate	no data available

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## 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

acids, Bases, Oxidizing agents, Reducing agents

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

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## 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**

no data available

**Skin corrosion/irritation**

no data available

**Serious eye damage/eye irritation**

no data available

**Respiratory or skin sensitization**

no data available

**Germ cell mutagenicity****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

**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**

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

**Synergistic effects**

no data available

**Additional Information**

RTECS: Not available

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**12. ECOLOGICAL INFORMATION****Toxicity**

no data available

**Persistence and degradability**

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**PBT and vPvB assessment**

no data available

**Other adverse effects**

no data available

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**13. DISPOSAL CONSIDERATIONS**

**Product**

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

**Contaminated packaging**

Dispose of as unused product.

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**14. TRANSPORT INFORMATION**

**DOT (US)**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

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**15. REGULATORY INFORMATION**

**OSHA Hazards**

No known OSHA hazards

**DSL Status**

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

Dimethyl 3-methylpent-2-enedioate

CAS-No.  
52313-87-8

**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 known 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**

Dimethyl 3-methylpent-2-enedioate

CAS-No.                      Revision Date  
52313-87-8

**New Jersey Right To Know Components**

Dimethyl 3-methylpent-2-enedioate

CAS-No.                      Revision Date  
52313-87-8

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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**16. OTHER INFORMATION**

**Further information**

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