

# SDS

## SAFETY DATA SHEET

Oakwood Products, Inc  
730 Columbia HWY N  
Estill, SC 29918  
[www.oakwoodchemical.com](http://www.oakwoodchemical.com)

**Phone Numbers:**

|                          |              |
|--------------------------|--------------|
| Product Information      | 803-739-8800 |
| Transportation Emergency | 800-451-8346 |
| Outside the USA          | 760-602-8700 |

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**MATERIAL IDENTIFICATION**

NAME: (R)-4-Methoxy-2-methyl-4-oxobutanoic acid  
CAS#: [81025-83-4]  
CAT#: 208963  
For R&D use only.

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**HAZARDS IDENTIFICATION****GHS Classification**

Flammable liquids (Category 3)  
Skin corrosion/irritation (Category 2)  
Serious eye damage/eye irritation (Category 2A)  
Respiratory tract irritation (Category 3)

**GHS Label elements, including precautionary statements****Pictograms****Signal Word**

Warning

**Hazard Statement(s)**

|      |                                  |
|------|----------------------------------|
| H226 | Flammable liquid and vapour      |
| H315 | Causes skin irritation           |
| H319 | Causes serious eye irritation    |
| H335 | May cause respiratory irritation |

**Precautionary Statement(s)**

|                    |                                                                                                                                  |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------|
| P210               | Keep away from heat/sparks/open flames/hot surfaces. — No smoking.                                                               |
| P261               | Avoid breathing dust/fume/gas/mist/vapours/spray.                                                                                |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |

**COMPOSITION/INFORMATION ON INGREDIENTS**

Synonyms : (R)-(+)-2-Methylsuccinic acid 4-methyl ester  
Formula : C<sub>6</sub>H<sub>10</sub>O<sub>4</sub>  
Molecular Weight : 146.14 g/mol

| CAS        | Description                               | Concentration |
|------------|-------------------------------------------|---------------|
| 81025-83-4 | (R)-4-Methoxy-2-methyl-4-oxobutanoic acid | 95+%          |

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**FIRST AID MEASURES****In case of eye contact**

Immediately flush eyes with running water for at least 15 minutes while keeping eyes open. Seek medical attention.

**In case of skin contact**

Wash thoroughly with soap and plenty of water. Seek medical attention.

**If inhaled**

Remove victim from source of exposure to fresh air. If breathing is difficult, administer oxygen. Seek medical attention.

**If swallowed**

Do not induce vomiting. Give water to victim to drink. Seek medical attention.

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**FIRE-FIGHTING MEASURES****Suitable extinguishing media**

Use carbon dioxide, dry chemical powder, alcohol-resistant or polymer foam.

**Special protective equipment for fire-fighters**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**Unusual fire and explosion hazards/decomposition of product**

emits toxic fumes under fire conditions.

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**ACCIDENTAL RELEASE MEASURES****Personal precautions**

Use personal protective equipment. Avoid breathing fumes, vapors, mists or gas. Ventilate area. Remove all sources of ignition. Evacuate personnel.

**Environmental precautions**

Prevent further leakage if safe to do so.

**Methods and materials for containment and clean up**

Absorb spills on sand or vermiculite and place in closed container for disposal.

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**HANDLING AND STORAGE****Precautions for safe handling**

Avoid prolonged use. Avoid all direct contact with material. Do not breathe dust or vapor. Wash

thoroughly after handling.

#### **Precautions for safe storage**

Keep container tightly closed. Store in a cool, dry, well-ventilated area.

### **EXPOSURE CONTROL/PERSONAL PROTECTION**

Contains no substances with occupational exposure limit values.

#### **Personal protective equipment**

##### **Eye/face protection**

Wear protective safety goggles or face shields tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

##### **Hand/skin protection**

Avoid all direct contact with product.

Wear chemical-resistant gloves.

Wear protective clothing and boots.

After contact with skin, wash immediately.

##### **Respiratory protection**

Ensure adequate ventilation during use. Approved respiratory equipment must be used when airborne concentrations are unknown or exceed the exposure limits.

### **PHYSICAL AND CHEMICAL PROPERTIES**

|                                              |                   |
|----------------------------------------------|-------------------|
| Appearance                                   | Liquid            |
| Odour                                        | no data available |
| Odour Threshold                              | no data available |
| Melting point/Freezing Point                 | no data available |
| Boiling Point                                | 241-242°C         |
| Flash Point                                  | 38°C-closed cup   |
| Evaporation Rate                             | no data available |
| Flammability (solid, gas)                    | no data available |
| Upper/Lower Flammability or Explosive limits | no data available |
| Vapour pressure                              | no data available |
| Relative Density                             | 1.150             |
| Solubility(ies)                              | no data available |
| Partition coefficient: n-octanol/water       | no data available |
| Auto-ignition temperature                    | no data available |
| Decomposition temperature                    | no data available |
| Viscosity                                    | no data available |
| Refractive Index                             | 1.4320            |

### **STABILITY AND REACTIVITY**

#### **Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

no data available

**Conditions to avoid**

Heat, flames and sparks. Extremes of temperature and direct sunlight.

**Incompatible materials**

Strong oxidizing agents.

**Hazardous decomposition products**

May evolve carbon monoxide and carbon dioxide.

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**TOXICOLOGICAL INFORMATION****Acute toxicity**

no data available

**Skin corrosion/irritation**

Causes skin irritation

**Serious eye damage/eye irritation**

Causes serious eye irritation

**Respiratory or skin sensitization**

no data available

**Germ cell mutagenicity**

no data available

**Carcinogenicity**

no data available

**Reproductive toxicity**

no data available

**STOT-single exposure**

May cause respiratory irritation

**STOT-repeated exposure**

no data available

**Aspiration hazard**

no data available

**Exposure Routes**

Irritating to skin, eyes, and respiratory system.

May have harmful effects if inhaled or swallowed.

To the best of our knowledge, the health hazards of this material have not been fully investigated.

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**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

**DISPOSAL CONSIDERATIONS**

Dissolve in or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all Federal, State and local laws.

**TRANSPORT INFORMATION**

**DOT**

Esters, n.o.s.

3

UN3272 III

**IMDG**

Esters, n.o.s.

3

UN3272 III

EMS-No: F-E, S-D

Marine Pollutant: No

**IATA**

Esters, n.o.s.

3

UN3272 III

**REGULATORY INFORMATION**

**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: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.

**New Jersey Right to Know Components**

This product may contain a chemical on the New Jersey Right to Know Components List.

(R)-4-Methoxy-2-methyl-4-oxobutanoic acid

**CAS**

81025-83-4

**California Prop. 65 Components**

This product may contain a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.

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## OTHER INFORMATION

Version : 1.0

Revision Date : 6/26/2013

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Oakwood shall not be held liable for any damage resulting from handling or from contact with the above product.