



## Material Safety Data Sheet

### **Aldehyde C-16**

#### Section 1 - Chemical Product

**MSDS Name:** Ethyl 3-methyl-3-phenylglycidate, 98% mixture of cis and trans

**Catalog Numbers:** AC259500000, AC259500250

**Synonyms:** 3-Methyl-3-phenylglycidic acid ethyl ester; Aldehyde C-16; alpha,beta-Epoxy-beta-methylhydrocinnamic acid, ethyl ester; C-16 aldehyde; EMPG; Ethyl 2,3-epoxy-3-methyl-3-phenylpropionate; Ethyl 2,3-epoxy-3-phenylbutyrate; Ethyl alpha,beta-epoxy-beta-methylhydrocinnamate; Ethyl ester of 2,3-epoxy-3-phenylbutanoic acid; Ethyl methylphenylglycidate; Hydrocinnamic acid, alpha,beta-epoxy-beta-methyl-, ethyl ester; Oxiranecarboxylate, 3-methyl-3-phenyl-, ethyl; Oxiranecarboxylic acid, 3-methyl-3-phenyl-, ethyl ester; Strawberry aldehyde

#### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
77-83-8	Oxiranecarboxylic acid, 3-methyl-3-phenyl-, ethyl ester	98	201-061-8

#### Section 3 - Hazards Identification

### EMERGENCY OVERVIEW

Appearance: clear yellow liquid.

**Caution!** Good laboratory procedures are recommended when handling this compound. This is expected to be a low hazard for usual industrial handling.

**Target Organs:** No data found.

### Potential Health Effects

**Eye:** Non-irritating to the eyes.

**Skin:** Non-irritating to the skin.

**Ingestion:** Low hazard for usual industrial handling.

**Inhalation:** Low hazard for usual industrial handling.

**Chronic:** No information found.

## Section 4 - First Aid Measures

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation develops, get medical aid.

**Skin:** Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

**Ingestion:** Wash mouth out with water. Get medical aid if irritation or symptoms occur.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

**Notes to Physician:** Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or appropriate foam.

**Flash Point:** 134 deg C ( 273.20 deg F)

**Autoignition Temperature:** Not applicable.

**Explosion Limits, Lower:**Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 0; Flammability: 1; Instability: 0

## Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Absorb spill using an absorbent, non-combustible material such as earth, sand, or vermiculite. Do not use combustible materials such as sawdust. Provide ventilation.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Use with adequate ventilation.

**Storage:** Store in a cool, dry place. Keep container closed when not in use.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Oxiranecarboxylic acid, 3-methyl-3-phenyl-, ethyl ester	none listed	none listed	none listed

**OSHA Vacated PELs:** Oxiranecarboxylic acid, 3-methyl-3-phenyl-, ethyl ester: No OSHA Vacated PELs are listed for this chemical.

### Personal Protective Equipment

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to minimize contact with skin.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

## Section 9 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance:** clear yellow

**Odor:** fruity odor

**pH:** Not available.

**Vapor Pressure:** Not available.

**Vapor Density:** 7.11

**Evaporation Rate:**Not available.  
**Viscosity:** Not available.  
**Boiling Point:** 272 - 275 deg C  
**Freezing/Melting Point:**Not available.  
**Decomposition Temperature:**Not available.  
**Solubility:** Insoluble.  
**Specific Gravity/Density:**1.0910g/cm<sup>3</sup>  
**Molecular Formula:**C<sub>12</sub>H<sub>14</sub>O<sub>3</sub>  
**Molecular Weight:**206.24

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.  
**Conditions to Avoid:** Incompatible materials, strong oxidants.  
**Incompatibilities with Other Materials:** Strong oxidizing agents.  
**Hazardous Decomposition Products:** Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.  
**Hazardous Polymerization:** Will not occur.

## Section 11 - Toxicological Information

**RTECS#:**  
**CAS#** 77-83-8: MW5250000  
**LD50/LC50:**  
CAS# 77-83-8:  
Oral, rat: LD50 = 5470 mg/kg;

**Carcinogenicity:**  
CAS# 77-83-8: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information found  
**Teratogenicity:** No information found  
**Reproductive Effects:** No information found  
**Mutagenicity:** Mutagenic effects have occurred in experimental animals.  
**Neurotoxicity:** No information found  
**Other Studies:**

## Section 12 - Ecological Information

No information available.

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

## Section 14 - Transport Information

	US DOT	Canada TDG
<b>Shipping Name:</b>	Not regulated as a hazardous material	No information available.
<b>Hazard Class:</b>		
<b>UN Number:</b>		
<b>Packing Group:</b>		

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 77-83-8 is listed on the TSCA inventory.

#### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

#### Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

#### TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

#### CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

#### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

**Section 313** No chemicals are reportable under Section 313.

#### Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

**Clean Water Act:**

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:**

None of the chemicals in this product are considered highly hazardous by OSHA.

**STATE**

CAS# 77-83-8 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

**European/International Regulations**

**European Labeling in Accordance with EC Directives**

**Hazard Symbols:**

Not available.

**Risk Phrases:**

**Safety Phrases:**

S 24/25 Avoid contact with skin and eyes.

**WGK (Water Danger/Protection)**

CAS# 77-83-8: No information available.

**Canada - DSL/NDSL**

CAS# 77-83-8 is listed on Canada's DSL List.

**Canada - WHMIS**

WHMIS: Not available.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**

CAS# 77-83-8 is not listed on the Canadian Ingredient Disclosure List.

**Section 16 - Additional Information**

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.*

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