# SAFETY DATA SHEET
Dihomo-.gamma.-Linolenic Acid

## Section 1. Identification of the Substance/Mixture and of the Company/Undertaking

<table>
<thead>
<tr>
<th>1.1 Product Code:</th>
<th>90230</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product Name:</strong></td>
<td>Dihomo-.gamma.-Linolenic Acid</td>
</tr>
<tr>
<td><strong>Synonyms:</strong></td>
<td>8Z,11Z,14Z-eicosatrienoic acid; DGLA;</td>
</tr>
</tbody>
</table>

### 1.2 Relevant identified uses of the substance or mixture and uses advised against:
- **Relevant identified uses:** For research use only, not for human or veterinary use.

### 1.3 Details of the Supplier of the Safety Data Sheet:
- **Company Name:** Cayman Chemical Company
  1180 E. Ellsworth Rd.
  Ann Arbor, MI 48108
- **Web site address:** [www.caymanchem.com](http://www.caymanchem.com)
- **Information:** Cayman Chemical Company +1 (734)971-3335
- **Emergency telephone number:**
  - CHEMTREC Within USA and Canada: +1 (800)424-9300
  - CHEMTREC Outside USA and Canada: +1 (703)527-3887

## Section 2. Hazards Identification

### 2.1 Classification of the Substance or Mixture:
- **Flammable Liquids, Category 2**

### 2.2 Label Elements:
- **GHS Signal Word:** Danger
- **GHS Hazard Phrases:** H225: Highly flammable liquid and vapor.
- **GHS Precaution Phrases:**
  - P210: Keep away from (heat/sparks/open flames/hot surfaces). - No smoking.
  - P280: Wear (protective gloves/protective clothing/eye protection/face protection).
- **GHS Response Phrases:**
  - P303+361+353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
- **GHS Storage and Disposal Phrases:**
  - Please refer to Section 7 for Storage and Section 13 for Disposal information.

### 2.3 Adverse Human Health Effects and Symptoms:
- **Adverse Human Health Effects:** Material may be irritating to the mucous membranes and upper respiratory tract.
- **May be harmful by inhalation, ingestion, or skin absorption.**
- **May cause eye, skin, or respiratory system irritation.**
- **To the best of our knowledge, the toxicological properties have not been thoroughly investigated.**
### Section 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>CAS # / RTECS #</th>
<th>Hazardous Components (Chemical Name)/ REACH Registration No.</th>
<th>Concentration</th>
<th>EC No./ EC Index No.</th>
<th>GHS Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1783-84-2 JX3880000</td>
<td>Dihomo-(\gamma)-Linolenic Acid</td>
<td>0.001 %</td>
<td>217-233-0 NA</td>
<td>No data available.</td>
</tr>
<tr>
<td>64-17-5 KQ63000000</td>
<td>Ethyl alcohol</td>
<td>99.999 %</td>
<td>200-578-6 603-002-00-5</td>
<td>Flam. Liq. 2: H225</td>
</tr>
</tbody>
</table>

### Section 4. First Aid Measures

4.1 **Description of First Aid Measures:**
- **In Case of Inhalation:** Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.
- **In Case of Skin Contact:** Immediately wash skin with soap and plenty of water for at least 20 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.
- **In Case of Eye Contact:** Hold eyelids apart and flush eyes with plenty of water for at least 20 minutes. Have eyes examined and tested by medical personnel.
- **In Case of Ingestion:** Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.
- **In Case of Inhalation:** Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.

4.2 **Important Symptoms and Effects, Both Acute and Delayed:** Irritating to eyes, skin, nose; may cause anemia, cough, CNS depression, drowsiness, headache, heart damage, lassitude (weakness, exhaustion), liver damage, narcosis, reproductive effects, teratogenic effects.

### Section 5. Fire Fighting Measures

5.1 **Suitable Extinguishing Media:** Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.
- **Unsuitable Extinguishing Media:** Use water spray to cool fire-exposed containers.

5.2 **Flammable Properties and Hazards:** Can release vapors that form explosive mixtures at temperatures at or above the flashpoint.
- **Container explosion may occur under fire conditions.**
- **Emits toxic fumes under fire conditions.**
- **Sensitive to static discharge.**
- **Vapors can travel to a source of ignition and flash back.**
  - **Flash Pt:** 14.00 °C  Method Used: Closed Cup
  - **Explosive Limits:** LEL: 3.3% at 25.0 °C  UEL: 19.0% at 25.0 °C
  - **Autoignition Pt:** 363.00 °C

5.3 **Fire Fighting Instructions:** As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.
- **Note:** Flammable as diluted in ethanol.
Section 6. Accidental Release Measures

6.1 Protective Precautions, Protective Equipment and Emergency Procedures:
Avoid breathing vapors and provide adequate ventilation.
As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).

6.2 Environmental Precautions:
Take steps to avoid release into the environment, if safe to do so.

6.3 Methods and Material For Containment and Cleaning:
Contain spill and collect, as appropriate.
Transfer to a chemical waste container for disposal in accordance with local regulations.

Up:

Section 7. Handling and Storage

7.1 Precautions To Be Taken in Handling:
Avoid breathing dust/fume/gas/mist/vapours/spray.
Avoid prolonged or repeated exposure.
Keep away from sources of ignition.
Take precautionary measures against static discharge.

7.2 Precautions To Be Taken in Storing:
Keep away from heat, sparks, and flame.
Keep container tightly closed.
Store in accordance with information listed on the product insert.

Other Precautions:
Hygroscopic.

Section 8. Exposure Controls/Personal Protection

8.1 Exposure Parameters:

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Partial Chemical Name</th>
<th>Britain EH40</th>
<th>France VL</th>
<th>Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>1783-84-2</td>
<td>Dihomo-.gamma.-Linolenic Acid</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
<tr>
<td>64-17-5</td>
<td>Ethyl alcohol</td>
<td>TWA: 1920 mg/m3 (1000 ppm) STEL: ()</td>
<td>TWA: 1900 mg/m3 (1000 ppm) STEL: 9500 mg/m3 (5000 ppm)</td>
<td>No data.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Partial Chemical Name</th>
<th>OSHA TWA</th>
<th>ACGIH TWA</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1783-84-2</td>
<td>Dihomo-.gamma.-Linolenic Acid</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
<tr>
<td>64-17-5</td>
<td>Ethyl alcohol</td>
<td>PEL: 1000 ppm</td>
<td>TLV: 1000 ppm</td>
<td>No data.</td>
</tr>
</tbody>
</table>

8.2 Exposure Controls:
8.2.1 Engineering Controls (Ventilation etc.):
Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

8.2.2 Personal protection equipment:
Eye Protection: Safety glasses
Protective Gloves: Compatible chemical-resistant gloves
Other Protective Clothing: Lab coat
Respiratory Equipment (Specify Type):
NIOSH approved respirator, as conditions warrant.

Work/Hygienic/Maintenance Practices:
Do not take internally.
Facilities storing or utilizing this material should be equipped with an eyewash and a safety shower.
Wash thoroughly after handling.
No data available.
Section 9. Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Physical States: [ ] Gas [X] Liquid [ ] Solid
Appearance and Odor: A solution in ethanol
Melting Point: No data.
Boiling Point: No data.
Flash Pt: 14.00 °C Method Used: Closed Cup
Evaporation Rate: No data.
Flammability (solid, gas): No data available.
Explosive Limits: LEL: 3.3% at 25.0 °C UEL: 19.0% at 25.0 °C
Vapor Pressure (vs. Air or mm Hg): 43 MM_HG at 20.0 °C
Vapor Density (vs. Air = 1): No data.
Specific Gravity (Water = 1): No data.
Solubility in Water: No data.
Autoignition Pt: 363.00 °C

9.2 Other Information

Percent Volatile: No data.
Molecular Formula & Weight: C20H34O2 306.5

Section 10. Stability and Reactivity

10.1 Reactivity: No data available.
10.2 Stability: Unstable [ ] Stable [X]
10.3 Stability Note(s): Stable if stored in accordance with information listed on the product insert.
10.4 Conditions To Avoid: heat, flames and sparks
10.5 Incompatibility - Materials alkali metals 
To Avoid: ammonia
peroxides
strong oxidizing agents
10.6 Hazardous Decomposition or Byproducts: carbon dioxide
carbon monoxide
Section 11. Toxicological Information

11.1 Information on Toxicological Effects: The toxicological effects of this product have not been thoroughly studied.

<table>
<thead>
<tr>
<th>NTP</th>
<th>IARC</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

11.2 Chronic Toxicological Effects: Ethanol - Investigated as a mutagen, reproductive effector, and tumorigen.

11.3 Information on Toxicological Effects: Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here. See actual entry in RTECS for complete information.

Dihomo-gamma-Linolenic Acid RTECS Number: JX3880000
Ethanol RTECS Number: KQ6300000

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

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<tr>
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<th>Hazardous Components (Chemical Name)</th>
<th>NTP</th>
<th>IARC</th>
<th>ACGIH</th>
<th>OSHA</th>
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<tbody>
<tr>
<td>1783-84-2</td>
<td>Dihomo-gamma-Linolenic Acid</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>64-17-5</td>
<td>Ethyl alcohol</td>
<td>n.a.</td>
<td>1</td>
<td>A4</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

Section 12. Ecological Information

12.1 Toxicity: Avoid release into the environment. Runoff from fire control or dilution water may cause pollution.

12.2 Persistence and Degradability: No data available.

12.3 Bioaccumulative Potential: No data available.

12.4 Mobility in Soil: No data available.

12.5 Results of PBT and vPvB assessment: No data available.

12.6 Other adverse effects: No data available.

Section 13. Disposal Considerations

13.1 Waste Disposal Method: Dispose in accordance with local, state, and federal regulations.

Section 14. Transport Information

14.1 LAND TRANSPORT (US DOT):
DOT Proper Shipping Name: Ethyl Alcohol Solution
DOT Hazard Class: 3 FLAMMABLE LIQUID
UN/NA Number: 1170 Packing Group: II

14.1 LAND TRANSPORT (European ADR/RID):
ADR/RID Shipping Name: Ethyl Alcohol Solution
UN Number: 1170 Packing Group: II
Hazard Class: 3 - FLAMMABLE LIQUID
Section 15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>S. 302 (EHS)</th>
<th>S. 304 RQ</th>
<th>S. 313 (TRI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1783-84-2</td>
<td>Dihomo-.gamma.-Linolenic Acid</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<tr>
<td>64-17-5</td>
<td>Ethyl alcohol</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>Other US EPA or State Lists</th>
</tr>
</thead>
<tbody>
<tr>
<td>1783-84-2</td>
<td>Dihomo-.gamma.-Linolenic Acid</td>
<td>CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No</td>
</tr>
<tr>
<td>64-17-5</td>
<td>Ethyl alcohol</td>
<td>CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No</td>
</tr>
</tbody>
</table>

Regulatory Information Statement: This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) No.1272/2008.

Section 16. Other Information

Revision Date: 04/15/2016

Additional Information About This Product: No data available.

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