



# American International Chemical, Inc.

Corporate Offices: (800) 238-0001

Internet: [www.aicma.com](http://www.aicma.com) Email: [info@aicma.com](mailto:info@aicma.com)

## MATERIAL SAFETY DATA SHEET

### LUTEIN ESTER OIL (PIVEG)

#### SECTION 1 - CHEMICAL PRODUCT AND COMPANY INFORMATION

American International Chemical, Inc. 135 Newbury Street Framingham, MA 01701	Emergency Number: Chemtrec  Information Number:	800-424-9300 703-527-3887 800-238-0001
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Date: December 2011

Synonyms:  $\beta,\epsilon$ -Carotene-3,3'-diol;  
3,3'-dihydroxy-d-carotene ((3R,3'R,6'R)-, -carotene-3,3'-diol  
alpha-carotene-3,3'-diol

CAS #: 127-40-2: Lutein  
8001-23-8: Safflower Oil  
59-02-9 Tocopherol  
137-66-6 Ascorbyl Palmitate

DOT Hazard Class: Not Regulated

#### SECTION 2 - COMPOSITION AND INFORMATION ON INGREDIENTS

Proprietary blend containing some or all of the following:

10% - 20%: Lutein  
80% - 90% Balance  
Safflower Oil  
Tocopherol  
Ascorbyl Palmitate

#### SECTION 3 - HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW:** A brilliant orange-red viscous liquid that presents little or no health hazard and no unusual hazard if involved in a fire.

**POTENTIAL HEALTH EFFECTS:**

**Skin:** May cause skin irritation. May cause discoloration of the skin.

**Eyes:** May cause irritation or burning.

**Inhalation:** May cause irritation to the respiratory tract.

**Ingestion:** Not a hazard with normal industrial usage.

**CARCINOGENICITY:** Not Identifiable

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#### **SECTION 4 - FIRST AID MEASURES**

**Skin:** Immediately wash skin with soap and water for at least 15 minutes.

**Eyes:** Immediately flush with plenty of water for at least 15 minutes, holding eye lids apart.

**Inhalation:** Remove to the fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

**Ingestion:** Wash out mouth with water.

**On All Of The Above:** Consult a physician if symptoms persist.

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#### **SECTION 5 - FIRE FIGHTING MEASURES**

Flash Point: Not Applicable

Flammable Limits: Not Available

Extinguishing Media: Use alcohol foam, carbon dioxide or water spray when fighting fires involving this material.

Special Fire Fighting Procedures: Use firefighting procedure that is appropriate to treat surrounding fire. All firefighters should use self-contained breathing apparatus and full fire-fighting turn-out gear.

Unusual Fire Explosion Hazard: During a fire, irritating and highly toxic gasses may be generated by thermal decomposition or combustion.

Auto Ignition Temperature: 380 °C

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#### **SECTION 6 - ACCIDENTAL RELEASE MEASURES**

Isolate hazard area and deny entry to unnecessary or unprotected personnel.

Contain spilled liquid with sand or earth. Place in a disposal container. Avoid runoff into storm sewers and ditches which lead to waterways.

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#### **SECTION 7 - HANDLING AND STORAGE**

Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk; evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents.

Suitable materials: Stainless steel, glass, polyethylene, enamel.

Storage conditions: Keep container tightly closed - cool - protected from light - protected from humidity - Do not store above 23 °C (73.4 °F).

Shelf Life: One year in the unopened original container, after opening the container, the contents should be used within a short period.

Packaging materials: Aluminum, polypropylene.

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#### **SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION**

RESPIRATORY PROTECTION: Use NIOSH/MSHA approved respirators.

VENTILATION REQUIREMENTS: Ventilate as necessary to eliminate vapor from the work area and maintain concentrations below the limit.

SKIN AND EYE PROTECTION: Use rubber or neoprene gloves, chemical goggles and clothing sufficient to protect skin and eyes from oil/vapors.

WORK, HYGIENIC PRACTICES: As required to protect skin and eyes from oil/vapors, safety showers and/or eye wash should be available. Do not leave food or smoke in work area. Wash thoroughly and remove or clean any contaminated clothing.

EXPOSURE LIMITS: None Established

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## **SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Boiling Point: Not Applicable

Vapor Pressure (MM Hg): Not Applicable

Vapor Density (AIR=1): Not Applicable

Specific Gravity (H<sub>2</sub>O=1): Not Available

Percent Volatile by Volume (%): Not Applicable

Melting Point: 190-193 °C

Evaporation Rate (Butyl Acetate=1): Not Applicable

Solubility in Water: Insoluble, slightly soluble in lipids.

pH: 3.8-4.0 (in aqueous dispersion)

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## **SECTION 10 - STABILITY AND REACTIVITY**

CHEMICAL STABILITY: Stable under normal temperatures and pressures.

HAZARDOUS POLYMERIZATION: Has not been reported.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

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## **SECTION 11 - TOXICOLOGICAL INFORMATION**

LD50/LC50: Not Available.

Lutein Ester Oil

Carcinogenicity: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information found.

Teratogenicity: None of the contained components have been shown in concentrations  $\geq 0.1\%$  to cause tetratogenicity or embryotoxicity.

Reproductive Effects: None of the contained components have been shown in concentrations  $\geq 0.1\%$  to cause reproductive toxicity.

Mutagenicity: No information found.

Neurotoxicity: No information found.

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#### **SECTION 12 - ECOLOGICAL INFORMATION**

Not Available

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#### **SECTION 13 - DISPOSAL CONSIDERATIONS**

Dispose of in accordance with all federal, state and local regulations.

RCRA WASTE #: Not Listed

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#### **SECTION 14 - TRANSPORTATION INFORMATION**

D.O.T. SHIPPING NAME: LUTEIN ESTER OIL

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#### **SECTION 15 - REGULATORY INFORMATION**

OSHA STATUS: Not listed

TSCA STATUS: Listed

CERCLA REPORTABLE REQUIREMENTS: (RQ) None

SARA TITLE III INFORMATION:

Section 302 Extremely Hazardous Substance: Not listed

Section 313 Toxic Chemicals: Not listed

Section 311/312 Hazard Category: Not considered a hazard.

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#### **SECTION 16 - OTHER INFORMATION**

Reason for Issue: New Product

**This information is given without any warranty or representation. It is believed to be correct but does not claim to be all-inclusive and shall be used only as a guide. American International Chemical, Inc., shall not be held liable for any damage resulting from handling or contact with the above product. It is offered solely for your consideration, investigation and verification.**