Telephone

Emergency Phone #

Fax

Material Safety Data Sheet Version 3.0

Concentration

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Revision Date 12/31/2008 Print Date 05/19/2009

Product name : γ-Linolenic acid

1. PRODUCT AND COMPANY IDENTIFICATION

Product Number 62174

Brand Fluka Company : Sigma-Aldrich Canada, Ltd.

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2149 Winston Park Drive

: +1 9058299292 : 800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

: cis,cis,cis-6,9,12-Octadecatrienoic acid Synonyms Formula : C₁₈H₃₀O₂

Molecular Weight : 278.43 g/mol CAS-No. EC-No. Index-No.

Gamma-linolenic acid 506-26-3

3. HAZARDS IDENTIFICATION WHMIS Classification

> Moderate skin irritant Moderate respiratory irritant

D2B Toxic Material Causing Other Toxic Effects

Moderate eye irritant HMIS Classification Health Hazard: 2

Flammability: 1 0 Physical hazards: Potential Health Effects Inhalation May be harmful if inhaled. Causes respiratory tract irritation.

May be harmful if absorbed through skin. Causes skin irritation. Skin Eyes Ingestion

Fluka - 62174

If inhaled

Causes eye irritation.

May be harmful if swallowed. 4. FIRST AID MEASURES

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

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

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In case of eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Flammable properties Flash point

Ignition temperature

Suitable extinguishing media

6. ACCIDENTAL RELEASE MEASURES

5. FIRE-FIGHTING MEASURES

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

no data available

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

110 °C (230 °F) - closed cup

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Personal precautions

Special protective equipment for fire-fighters Wear self contained breathing apparatus for fire fighting if necessary.

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Environmental precautions Do not let product enter drains.

Methods for cleaning up

disposal. 7. HANDLING AND STORAGE

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for

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.

Handling

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Light sensitive. Store under inert gas. Air sensitive.

Normal measures for preventive fire protection.

Recommended storage temperature: -20 °C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If

components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and

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Skin and body protection Choose body protection according to the amount and concentration of the dangerous substance at the work

Personal protective equipment Respiratory protection

Hand protection Handle with gloves Eye protection Safety glasses

of workday.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end

Contains no substances with occupational exposure limit values.

9. PHYSICAL AND CHEMICAL PROPERTIES Appearance

Sensitisation no data available

probable, possible or confirmed human carcinogen by IARC.

Skin May be harmful if absorbed through skin. Causes skin irritation. Causes eye irritation. May be harmful if swallowed. Ingestion

12. ECOLOGICAL INFORMATION

Further information on ecology

service to dispose of this material.

no data available

no data available

DOT (US)

IMDG

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Not dangerous goods

15. REGULATORY INFORMATION

WHMIS Classification

DSL Status

Ecotoxicity effects no data available

13. DISPOSAL CONSIDERATIONS Product

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal

Not dangerous goods Not dangerous goods

Elimination information (persistence and degradability)

16. OTHER INFORMATION Further information Copyright 2008 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

All components of this product are on the Canadian DSL list.

Toxic Material Causing Other Toxic Effects

the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

clear, liquid Form Colour light yellow Safety data no data available pΗ Melting point no data available Boiling point no data available Flash point 110 °C (230 °F) - closed cup no data available Ignition temperature Lower explosion limit no data available Upper explosion limit no data available no data available Water solubility 10. STABILITY AND REACTIVITY Storage stability Stable under recommended storage conditions. Materials to avoid Strong oxidizing agents Hazardous decomposition products Hazardous decomposition products formed under fire conditions. - Carbon oxides 11. TOXICOLOGICAL INFORMATION Sigma-Aldrich Corporation Fluka - 62174 Page 3 of www.sigma-aldrich.com

Acute toxicity no data available Irritation and corrosion

no data available

Chronic exposure

IARC:

Signs and Symptoms of Exposure To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Potential Health Effects Inhalation May be harmful if inhaled. Causes respiratory tract irritation.

No component of this product present at levels greater than or equal to 0.1% is identified as

Contaminated packaging Dispose of as unused product. 14. TRANSPORT INFORMATION

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a

Moderate skin irritant Moderate respiratory irritant Moderate eye irritant

guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Co., shall not be held liable for any damage resulting from handling or from contact with

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