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SIGMA-ALDRICH
                     MATERIAL SAFETY DATA SHEET
                                              Date Printed: 05/25/2009
                                              Date Updated: 02/04/2006
                                                         Version 1.2
Section 1 - Product and Company Information
Product Name
                             Conjugated (9Z,11E)-Linoleic acid Solut
                             91396
Product Number
Brand
                             FLUKA
                             Sigma-Aldrich Canada, Ltd
Company
Address
                             2149 Winston Park Drive
                             Oakville ON L6H 6J8 CA
                             9058299500
Technical Phone:
                             9058299292
Fax:
                             800-424-9300
Emergency Phone:
Section 2 - Composition/Information on Ingredient
Substance Name
                                        CAS #
                                                              SARA 313
CONJUGATED (9Z,11E)-LINOLEIC ACID
                                                               Yes
SOLUTION IN METHANOL
                                        CAS #
                                                    Percent
Ingredient Name
                                                               SARA 313
METHANOL
                                        67-56-1
                                                    >- 95
                                                               Yes
                                                    <- 99
                                                    >= 1
LINOLEIC ACID (9-CIS, 11-TRANS)
                                        2540-56-9
                                                               No
                                                    <- 5
Section 3 - Hazards Identification
EMERGENCY OVERVIEW
   Flammable (USA) Highly Flammable (EU). Toxic.
   Toxic by inhalation, in contact with skin and if swallowed.
   Irritating to eyes and skin. Toxic: danger of very serious
   irreversible effects through inhalation, in contact with skin and
   if swallowed.
   Target organ(s): Eyes. Kidneys.
HMIS RATING
   HEALTH: 2*
   FLAMMABILITY: 3
   REACTIVITY: 0
NFPA RATING
  HEALTH: 2
   FLAMMABILITY: 3
   REACTIVITY: 0
   *additional chronic hazards present.
For additional information on toxicity, please refer to Section 11.
Section 4 - First Aid Measures
ORAL EXPOSURE
   If swallowed, wash out mouth with water provided person is
   conscious. Call a physician immediately.
INHALATION EXPOSURE
   If inhaled, remove to fresh air. If not breathing give
   artificial respiration. If breathing is difficult, give oxygen.
DERMAL EXPOSURE
  In case of skin contact, flush with copious amounts of water for
   at least 15 minutes. Remove contaminated clothing and shoes.
   Call a physician.
EYE EXPOSURE
   In case of contact with eyes, flush with copious amounts of
   water for at least 15 minutes. Assure adequate flushing by
   separating the eyelids with fingers. Call a physician.
Section 5 - Fire Fighting Measures
FLAMMABLE HAZARDS
   Flammable Hazards: Yes
EXPLOSION HAZARDS
   Vapor may travel considerable distance to source of ignition and
   flash back. Container explosion may occur under fire conditions.
FLASH POINT
  N/A
AUTOIGNITION TEMP
   N/A
FLAMMABILITY
  N/A
EXTINGUISHING MEDIA
   Suitable: Water spray. Carbon dioxide, dry chemical powder, or
   appropriate foam.
FIREFIGHTING
   Protective Equipment: Wear self-contained breathing apparatus
   and protective clothing to prevent contact with skin and eyes.
   Specific Hazard(s): Flammable liquid. Emits toxic fumes under
   fire conditions.
Section 6 - Accidental Release Measures
PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL
   Evacuate area. Shut off all sources of ignition.
PROCEDURE(S) OF PERSONAL PRECAUTION(S)
   Wear self-contained breathing apparatus, rubber boots, and heavy
   rubber gloves.
METHODS FOR CLEANING UP
   Cover with dry-lime, sand, or soda ash. Place in covered
   containers using non-sparking tools and transport outdoors.
   Ventilate area and wash spill site after material pickup is
   complete.
ENVIRONMENTAL PRECAUTION(S)
   Do not allow material to enter drains or water courses. Avoid
   contaminating sewers and waterways with this material.
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Section 7 - Handling and Storage
HANDLING
   User Exposure: Do not breathe vapor. Avoid contact with eyes,
   skin, and clothing. Avoid prolonged or repeated exposure. Do not
   use if skin is cut or scratched. Wash thoroughly after handling.
STORAGE
   Suitable: Keep tightly closed. Keep away from heat, sparks, and
   open flame.
   Store at -20°C
Section 8 - Exposure Controls / PPE
ENGINEERING CONTROLS
   Safety shower and eye bath. Use nonsparking tools. Use only in a
   chemical fume hood.
PERSONAL PROTECTIVE EQUIPMENT
   Respiratory: Use respirators and components tested and approved
   under appropriate government standards such as NIOSH (US) or CEN
   (EU). Use supplied-air or SCBA respirators. Europe permits the use
   of type AXBEK full-face cartridge respirators (EN 14387).
   Hand: Compatible chemical-resistant gloves.
   Eye: Chemical safety goggles.
GENERAL HYGIENE MEASURES
  Wash thoroughly after handling. Discard contaminated clothing and
   shoes.
EXPOSURE LIMITS
Country Source
                                        Value
                              Type
Poland
                              NDS
                                        100 MG/M3
Poland
                                        300 MG/M3
                              NDSCh
Poland
                              NDSP
Section 9 - Physical/Chemical Properties
                       Physical State: Liquid
Appearance
Property
                       Value
                                            At Temperature or Pressure
рΗ
                       N/A
pn
BP/BP Range
                       N/A
                       N/A
MP/MP Range
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Explosion Limits
                       N/A
Flammability
Autoignition Temp
                        N/A
Refractive Index
Optical Rotation
                        N/A
                        N/A
Miscellaneous Data
                        N/A
Solubility
                        N/A
N/A - not available
Section 10 - Stability and Reactivity
STABILITY
   Stable: Stable.
   Materials to Avoid: Acids, Acid chlorides, Acid anhydrides,
   Oxidizing agents, Alkali metals, Reducing agents.
HAZARDOUS DECOMPOSITION PRODUCTS
   Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide,
   Nitrogen oxides.
HAZARDOUS POLYMERIZATION
   Hazardous Polymerization: Will not occur
Section 11 - Toxicological Information
ROUTE OF EXPOSURE
   Skin Contact: May cause skin irritation.
   Skin Absorption: Toxic if absorbed through skin.
   Eye Contact: May cause eye irritation.
   Inhalation: Material may be irritating to mucous membranes and upper respiratory tract. Toxic if inhaled.
   Ingestion: Toxic if swallowed.
TARGET ORGAN(S) OR SYSTEM(S)
   Eyes. Kidneys. Liver. Heart.
SIGNS AND SYMPTOMS OF EXPOSURE
   Nausea, headache, and vomiting. Gastrointestinal disturbances.
   Dizziness. Weakness. Confusion. Drowsiness. Unconsciousness. To
   the best of our knowledge, the chemical, physical, and
   toxicological properties have not been thoroughly investigated.
   Ingestion can cause: Methyl alcohol may be fatal or cause
   blindness if swallowed. Cannot be made non-poisonous.
Section 12 - Ecological Information
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Freezing Point

Vapor Density

VOC Content

Viscosity

Flash Point

Water Content

Solvent Content

Surface Tension

Evaporation Rate

No data available.

DOT

IATA

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UN#: 1230 Class: 3

PIH: Not PIH

IATA UN Number: 1230

SARA LISTED: Yes

DSL: Yes NDSL: No

DISCLAIMER

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WARRANTY

CANADA REGULATORY INFORMATION

Section 16 - Other Information

to SARA313 reporting requirements.

Section 13 - Disposal Considerations

local environmental regulations.

Packing Group: Packing Group II Hazard Label: Flammable liquid

Proper Shipping Name: Methanol solution

Proper Shipping Name: Methanol solution

Section 14 - Transport Information

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Contact a licensed professional waste disposal service to dispose of this material. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and

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Vapor Pressure

Odor Threshold Volatile®

Saturated Vapor Conc. N/A

Partition Coefficient N/A Decomposition Temp. N/A

N/A

N/A

N/A N/A N/A

N/A

N/A

N/A N/A

N/A

N/A

N/A

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Hazard Class: 3
   Packing Group: II
Section 15 - Regulatory Information
EU ADDITIONAL CLASSIFICATION
   Symbol of Danger: F-T
   Indication of Danger: Highly Flammable. Toxic.
   R: 11-23/24/25-39/23/24/25
   Risk Statements: Highly flammable. Toxic by inhalation, in contact with skin and if swallowed. Toxic: danger of very
   serious irreversible effects through inhalation, in contact with
   skin and if swallowed.
   s: 24-36/37-45
   Safety Statements: Avoid contact with skin. Wear suitable
   protective clothing and gloves. In case of accident or if you
   feel unwell, seek medical advice immediately (show the label
   where possible).
US CLASSIFICATION AND LABEL TEXT
   Indication of Danger: Flammable (USA) Highly Flammable (EU).
   Toxic.
   Risk Statements: Toxic by inhalation, in contact with skin and if swallowed. Irritating to eyes and skin. Toxic: danger of very
   serious irreversible effects through inhalation, in contact with
   skin and if swallowed.
                        Avoid contact with skin. In case of contact
   with eyes, rinse immediately with plenty of water and seek
   medical advice. Wear suitable protective clothing and gloves. In
   case of accident or if you feel unwell, seek medical advice
   immediately (show the label where possible).
   US Statements: Target organ(s): Eyes. Kidneys.
UNITED STATES REGULATORY INFORMATION
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NOTES: This product is or contains a component that is subject

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS

For R&D use only. Not for drug, household or other uses.

The above information is believed to be correct but does not

purport to be all inclusive and shall be used only as a guide. The

information in this document is based on the present state of our

shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

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appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc.,

knowledge and is applicable to the product with regard to

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contains all the information required by the CPR.

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