## MATERIAL SAFETY DATA SHEET

Date Printed: 12/19/2008 Date Updated: 02/05/2006 Version 1.4

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Section 1 - Product and Company Information
Product Name
                              ETHYL HEPTANOATE, 99%
                              112364
Product Number
Brand
                              ALDRICH
                              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
                                                                SARA 313
ETHYL HEPTANOATE
                                         106-30-9
                C9H18O2
Formula
                 Cognac oil * Enanthylic ether * Ethyl enanthate *
Synonyms
                 Ethyl heptanoate * Ethyl n-heptanoate * Ethyl
                 heptoate * Ethyl heptylate * Ethyl oenanthate *
                 Ethyl oenanthylate * Oenanthic ether
                 MJ2087000
RTECS Number:
Section 3 - Hazards Identification
EMERGENCY OVERVIEW
   Combustible.
HMIS RATING
   HEALTH: 0
   FLAMMABILITY: 2
   REACTIVITY: 0
NFPA RATING
   HEALTH: 0
   FLAMMABILITY: 2
   REACTIVITY: 0
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.
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 contact, immediately wash skin with soap and copious
   amounts of water.
EYE EXPOSURE
   In case of contact, immediately flush eyes with copious amounts
   of water for at least 15 minutes.
Section 5 - Fire Fighting Measures
FLASH POINT
   165.2 °F 74 °C Method: closed cup
AUTOIGNITION TEMP
   N/A
FLAMMABILITY
   N/A
EXTINGUISHING MEDIA
   Suitable: For small (incipient) fires, use media such as
   "alcohol" foam, dry chemical, or carbon dioxide. For large
   fires, apply water from as far as possible. Use very large
   quantities (flooding) of water applied as a mist or spray; solid
   streams of water may be ineffective. Cool all affected
   containers with flooding quantities of water.
FIREFIGHTING
   Protective Equipment: Wear self-contained breathing apparatus
   and protective clothing to prevent contact with skin and eyes.
   Specific Hazard(s): Combustible liquid. Emits toxic fumes under
   fire conditions.
Section 6 - Accidental Release Measures
PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL
   Evacuate area.
PROCEDURE(S) OF PERSONAL PRECAUTION(S)
   Wear respirator, chemical safety goggles, 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.
Section 7 - Handling and Storage
HANDLING
   User Exposure: Avoid breathing vapor. Avoid contact with eyes,
   skin, and clothing. Avoid prolonged or repeated exposure.
STORAGE
   Suitable: Keep tightly closed. Keep away from heat and open
Section 8 - Exposure Controls / PPE
ENGINEERING CONTROLS
   Safety shower and eye bath. Mechanical exhaust required.
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PERSONAL PROTECTIVE EQUIPMENT
   Respiratory: Use respirators and components tested and approved
   under appropriate government standards such as NIOSH (US) or CEN
    (EU). Where risk assessment shows air-purifying respirators are
   appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as
   a backup to engineering controls. If the respirator is the sole
   means of protection, use a full-face supplied air respirator.
   Hand: Compatible chemical-resistant gloves.
   Eye: Chemical safety goggles.
GENERAL HYGIENE MEASURES
   Wash contaminated clothing before reuse. Wash thoroughly after
   handling.
Section 9 - Physical/Chemical Properties
                         Physical State: Clear liquid
Appearance
                         Color: Almost colorless
                                             At Temperature or Pressure
Property
                        Value
                      158.24 AMU
Molecular Weight
                        N/A
BP/BP Range
                        186.0 − 188.0 °C
                      - 66.0 °C
N/A
MP/MP Range
Freezing Point
Vapor Pressure
                        N/A
Vapor Density
Saturated Vapor Conc. N/A
             0.868 g/cm3
N/A
SG/Density
Bulk Density
Odor Threshold
                        N/A
Volatile%
                        N/A
                        N/A
VOC Content
Water Content
                        N/A
Solvent Content
Evaporation Rate
                       N/A
                        N/A
Viscosity
Surface Tension
                       N/A
Partition Coefficient N/A
Decomposition Temp. N/A
                        165.2 °F 74 °C Method: closed cup
Flash Point
Explosion Limits N/A
                     N/A
N/A
1.413
Flammability
Autoignition Temp
Refractive Index
Optical Rotation
                        N/A
                      N/A
N/A
Miscellaneous Data
Solubility
N/A - not available
Section 10 - Stability and Reactivity
STABILITY
   Stable: Stable.
   Materials to Avoid: Strong oxidizing agents, Strong bases.
HAZARDOUS DECOMPOSITION PRODUCTS
   Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.
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HAZARDOUS POLYMERIZATION
   Hazardous Polymerization: Will not occur
Section 11 - Toxicological Information
ROUTE OF EXPOSURE
   Skin Contact: May cause skin irritation.
   Skin Absorption: May be harmful if absorbed through the skin.
   Eye Contact: May cause eye irritation.
   Inhalation: May be harmful if inhaled. Material may be
   irritating to mucous membranes and upper respiratory tract.
   Ingestion: May be harmful if swallowed.
SIGNS AND SYMPTOMS OF EXPOSURE
   To the best of our knowledge, the chemical, physical, and
   toxicological properties have not been thoroughly investigated.
TOXICITY DATA
   Oral
   Rat
   > 34640 mg/kg
   Remarks: Skin and Appendages: Other: Hair. Behavioral:Somnolence
   (general depressed activity). Behavioral:Coma.
   Skin
   Rabbit
   > 5000 mg/kg
Section 12 - Ecological Information
No data available.
Section 13 - Disposal Considerations
APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION
   Contact a licensed professional waste disposal service to dispose
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Section 14 - Transport Information

DOT
Proper Shipping Name: Combustible liquid, n.o.s.
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Hazard Label: None

Class: COMBUSTIBLE LIQUID

Packing Group: Packing Group III

UNITED STATES REGULATORY INFORMATION

ISCA INVENTORY ITEM: Yes

UN#: NA1993

PIH: Not PIH

transport.

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SARA LISTED: No

US CLASSIFICATION AND LABEL TEXT
US Statements: Combustible.

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Non-Hazardous for Air Transport: Non-hazardous for air

of this material. This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

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guarantee of the properties of the product. Sigma-Aldrich Inc.,
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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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CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: Yes
NDSL: No

Section 16 - Other Information

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

WARRANTY
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 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 Inc.,

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