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SIGMA-ALDRICH
                     MATERIAL SAFETY DATA SHEET
                                               Date Printed: 12/11/2008
                                               Date Updated: 06/30/2008
                                                          Version 1.5
Section 1 - Product and Company Information
Product Name
                              (-)-EPICATECHIN
Product Number
                             E1753
Brand
                             SIGMA
                             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
(-)-EPICATECHIN
                                         490-46-0
Formula
                C15H14O6
                1-Acacatechin * 2H-1-Benzopyran-3,5,7-triol,
Synonyms
                2-(3,4-dihydroxyphenyl)-3,4-dihydro-, (2R-cis)-
                (9CI) * (-)-Epicatechin * 1-Epicatechin *
                 (-)-Epicatechol * 1-Epicatechol
RTECS Number:
                KB3745000
Section 3 - Hazards Identification
EMERGENCY OVERVIEW
   Irritant.
   Irritating to eyes, respiratory system and skin.
HMIS RATING
   HEALTH: 2
   FLAMMABILITY: 0
   REACTIVITY: 0
NFPA RATING
   HEALTH: 2
   FLAMMABILITY: 0
   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
   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): Emits toxic fumes under fire conditions.
Section 6 - Accidental Release Measures
PROCEDURE(S) OF PERSONAL PRECAUTION(S)
   Wear respirator, chemical safety goggles, rubber boots, and
   heavy rubber gloves.
METHODS FOR CLEANING UP
   Sweep up, place in a bag and hold for waste disposal. Avoid
   raising dust. Ventilate area and wash spill site after material
   pickup is complete.
Section 7 - Handling and Storage
HANDLING
   User Exposure: Do not breathe dust. Avoid contact with eyes,
   skin, and clothing. Avoid prolonged or repeated exposure.
STORAGE
   Suitable: Keep tightly closed.
Section 8 - Exposure Controls / PPE
ENGINEERING CONTROLS
   Safety shower and eye bath. Mechanical exhaust required.
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 dust mask type N95 (US) or type P1 (EN 143)
   respirator.
   Hand: Compatible chemical-resistant gloves.
   Eye: Chemical safety goggles.
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GENERAL HYGIENE MEASURES
   Wash thoroughly after handling.
Section 9 - Physical/Chemical Properties
                        Physical State: Solid
Appearance
                        Color: Faintly beige
                        Form: Powder
Property
                        Value
                                            At Temperature or Pressure
Molecular Weight
                       290.27 AMU
                       N/A
BP/BP Range
                       N/A
MP/MP Range
                        240 °C
Freezing Point
                        N/A
Vapor Pressure
                        N/A
Vapor Density
Saturated Vapor Conc.
SG/Density
                        N/A
Bulk Density
                       N/A
Odor Threshold
                      N/A
Volatile%
                       N/A
VOC Content
                       N/A
Water Content
Solvent Content
Evaporation Rate
                      N/A
Viscosity
                       N/A
Surface Tension
Partition Coefficient N/A
Decomposition Temp. N/A
Flash Point
Explosion Limits
                        N/A
Flammability
Autoignition Temp
                        N/A
Refractive Index
                       N/A
Optical Rotation
                       Degree of Rotation: 10 g/l Solvent:
                        -67 - -56 (+/-2)
                                           acetone/H2O 1:1
Miscellaneous Data
                       N/A
Solubility
                       Solubility in Water:Soluble.
                        Solvent: Methanol Acetone Ethanol
                        Other Solvents: THF
N/A - not available
Section 10 - Stability and Reactivity
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Stable: Stable.
  Materials to Avoid: Strong oxidizing agents.
HAZARDOUS DECOMPOSITION PRODUCTS
  Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.
HAZARDOUS POLYMERIZATION
  Hazardous Polymerization: Will not occur
Section 11 - Toxicological Information
ROUTE OF EXPOSURE
   Skin Contact: Causes skin irritation.
   Skin Absorption: May be harmful if absorbed through the skin.
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   Eye Contact: Causes eye irritation.
   Inhalation: May be harmful if inhaled. Material is 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
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toxicological properties have not been thoroughly investigated.

TOXICITY DATA

Mouse 1 GM/KG LD50

Intraperitoneal

Species: Human Dose: 500 MG/L

No data available.

DOT

CHRONIC EXPOSURE - MUTAGEN

Cell Type: lymphocyte

Section 12 - Ecological Information

Section 13 - Disposal Considerations

environmental regulations.

Proper Shipping Name: None

Section 14 - Transport Information

suitable protective clothing.

UNITED STATES REGULATORY INFORMATION

CANADA REGULATORY INFORMATION

Section 16 - Other Information

SARA LISTED: No

DSL: No NDSL: No

Mutation test: Sister chromatid exchange

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible

solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local

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Non-Hazardous for Transport: This substance is
   considered to be non-hazardous for transport.
IATA
  Non-Hazardous for Air Transport: Non-hazardous for air
  transport.
Section 15 - Regulatory Information
EU ADDITIONAL CLASSIFICATION
   Symbol of Danger: Xi
  Indication of Danger: Irritant.
  R: 36/37/38
  Risk Statements: Irritating to eyes, respiratory system and skin.
   s: 26-36
   Safety Statements: In case of contact with eyes, rinse
   immediately with plenty of water and seek medical advice. Wear
   suitable protective clothing.
US CLASSIFICATION AND LABEL TEXT
   Indication of Danger: Irritant.
   Risk Statements: Irritating to eyes, respiratory system and skin.
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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
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appropriate safety precautions. It does not represent any

guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or

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

Safety Statements: In case of contact with eyes, rinse

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.

immediately with plenty of water and seek medical advice. Wear

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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