

MATERIAL SAFETY DATA SHEET

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Version 1.5

Section 1 - Product and Company Information

Product Name PHENETHYL ALCOHOL, 99+%
Product Number P13606
Brand ALDRICH

Company Sigma-Aldrich
Address 3050 Spruce Street
SAINT LOUIS MO 63103 US

Technical Phone: 800-325-5832
Fax: 800-325-5052
Emergency Phone: 314-776-6555

Section 2 - Composition/Information on Ingredient

| Substance Name | CAS # | SARA 313 |
|-----------------|---------|----------|
| 2-PHENYLETHANOL | 60-12-8 | No |

Formula C8H10O
Synonyms Benzyl carbinol * Ethanol, 2-phenyl- *
beta-Fenethylalkohol (Czech) * beta-Fenylethanol
(Czech) * beta-Hydroxyethylbenzene * Methanol,
benzyl- * PEA * beta-Pea * Phenethanol *
beta-Phenethyl alcohol * 2-Phenethyl alcohol *
beta-Phenylethanol * 2-Phenylethanol *
Phenylethyl alcohol * beta-Phenylethyl alcohol *
2-Phenylethyl alcohol

RTECS Number: SG7175000

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Toxic (USA) Harmful (EU).

Harmful in contact with skin and if swallowed. Irritating to eyes and skin.

Readily absorbed through skin. Target organ(s): Central nervous system.

HMIS RATING

HEALTH: 2*

FLAMMABILITY: 1

REACTIVITY: 0

NFPA RATING

HEALTH: 2

FLAMMABILITY: 1

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

FLASH POINT

215.6 °F 102 °C Method: closed cup

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 TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area and keep personnel upwind.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

HANDLING

User Exposure: Do not breathe vapor. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

STORAGE

Suitable: Keep tightly closed.

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS

Use only in a chemical fume hood. Safety shower and eye bath.

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

| | | |
|-----------------------|------------------------|----------------------------|
| Appearance | Physical State: Liquid | |
| Property | Value | At Temperature or Pressure |
| Molecular Weight | 122.17 AMU | |
| pH | N/A | |
| BP/BP Range | 220 °C | |
| MP/MP Range | - 27.0 °C | |
| Freezing Point | N/A | |
| Vapor Pressure | N/A | |
| Vapor Density | 4.21 g/l | |
| Saturated Vapor Conc. | N/A | |
| SG/Density | 1.02 g/cm ³ | |
| Bulk Density | N/A | |
| Odor Threshold | N/A | |
| Volatile% | N/A | |
| VOC Content | N/A | |
| Water Content | N/A | |
| Solvent Content | N/A | |
| Evaporation Rate | N/A | |
| Viscosity | N/A | |
| Surface Tension | N/A | |
| Partition Coefficient | N/A | |
| Decomposition Temp. | N/A | |
| Flash Point | 215.6 °F 102 °C | Method: closed cup |
| Explosion Limits | N/A | |
| Flammability | N/A | |
| Autoignition Temp | N/A | |
| Refractive Index | 1.534 | |
| Optical Rotation | N/A | |
| Miscellaneous Data | N/A | |
| Solubility | N/A | |

N/A = not available

Section 10 - Stability and Reactivity

STABILITY

Stable: Stable.

Materials to Avoid: Strong oxidizing agents, Strong acids.

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: Readily absorbed through skin. Harmful if absorbed through skin.

Eye Contact: Causes eye irritation.

Inhalation: Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.

Ingestion: Harmful if swallowed.

TARGET ORGAN(S) OR SYSTEM(S)

Central nervous system.

SIGNS AND SYMPTOMS OF EXPOSURE

Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting.

TOXICITY DATA

Oral

Rat

1790 mg/kg

LD50

Remarks: Gastrointestinal:Gastritis. Behavioral:Coma.

Inhalation

Rat

> 500 mg/m3

LC50

Remarks: Nutritional and Gross Metabolic:Changes in:Body temperature decrease. Behavioral:Somnolence (general depressed activity). Blood:Normocytic anemia.

Oral

Mouse

2540 mg/kg

LD50

Skin

Rabbit

790 UL/KG

LD50

Oral

Guinea pig

2540 mg/kg

LD50

Intraperitoneal

Guinea pig

200 MG/KG

LD50

IRRITATION DATA

Skin
Rabbit
100 mg
24H
Remarks: Moderate irritation effect

Eyes
Rabbit
12,000 mg
10M
Remarks: Mild irritation effect

Eyes
Rabbit
0.75 mg
24H
Remarks: Severe irritation effect

Skin
Guinea pig
100 %
Remarks: Mild irritation effect

Skin
Guinea pig
100 mg
24H
Remarks: Moderate irritation effect

CHRONIC EXPOSURE - TERATOGEN

Species: Rat
Dose: 43 MG/KG
Route of Application: Oral
Exposure Time: (6-15D PREG)
Result: Effects on Newborn: Growth statistics (e.g., reduced weight gain). Specific Developmental Abnormalities: Craniofacial (including nose and tongue). Specific Developmental Abnormalities: Eye, ear.

Species: Rat
Dose: 430 MG/KG
Route of Application: Oral
Exposure Time: (6-15D PREG)
Result: Effects on Embryo or Fetus: Fetal death. Specific Developmental Abnormalities: Musculoskeletal system. Specific Developmental Abnormalities: Urogenital system.

Species: Rat
Dose: 4300 MG/KG
Route of Application: Skin
Exposure Time: (6-15D PREG)
Result: Specific Developmental Abnormalities: Musculoskeletal system.

CHRONIC EXPOSURE - MUTAGEN

Species: Mouse
Dose: 8360 UMOL/L
Cell Type: Ascites tumor

Mutation test: Other mutation test systems

CHRONIC EXPOSURE - REPRODUCTIVE HAZARD

Species: Rat
Dose: 14 GM/KG
Route of Application: Skin
Exposure Time: (6-15D PREG)
Result: Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).
Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Specific Developmental Abnormalities: Other developmental abnormalities.

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 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 environmental regulations.

Section 14 - Transport Information

DOT

Proper Shipping Name: Toxic, liquids, organic, n.o.s.
UN#: 2810
Class: 6.1
Packing Group: Packing Group III
Hazard Label: Toxic substances.
PIH: Not PIH

IATA

Proper Shipping Name: Toxic liquid, organic, n.o.s.
IATA UN Number: 2810
Hazard Class: 6.1
Packing Group: III

Section 15 - Regulatory Information

EU ADDITIONAL CLASSIFICATION

Symbol of Danger: Xn
Indication of Danger: Harmful.
R: 21/22-36/38
Risk Statements: Harmful in contact with skin and if swallowed. Irritating to eyes and skin.
S: 26-28-36/37
Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of water. Wear suitable protective clothing and gloves.

US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Toxic (USA) Harmful (EU).
Risk Statements: Harmful in contact with skin and if swallowed. Irritating to eyes and skin.
Safety Statements: In case of contact with eyes, rinse

immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of water. Wear suitable protective clothing and gloves.

US Statements: Readily absorbed through skin. Target organ(s): Central nervous system.

UNITED STATES REGULATORY INFORMATION

SARA LISTED: No

TSCA INVENTORY ITEM: Yes

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., 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. Copyright 2008 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.