

MATERIAL SAFETY DATA SHEET

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Version 1.6

Section 1 - Product and Company Information

Product Name 1-PHENYLETHANOL, 98%
Product Number P13800
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 No
1-PHENYLETHANOL	98-85-1	

Formula C8H10O
Synonyms Benzenemethanol, alpha-methyl- * Ethanol,
1-phenyl- * 1-Fenylethanol (Czech) *
Fenyl-methylkarbinol (Czech) * Methanol,
methylphenyl- * alpha-Methylbenzenemethanol *
Methylphenylcarbinol * NCI-C55685 *
alpha-Phenethyl alcohol * 1-Phenethyl alcohol *
1-Phenylethanol * Phenylmethylcarbinol *
Styrallyl alcohol * Styralyl alcohol

RTECS Number: D09275000

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Toxic (USA) Harmful (EU).

Harmful if swallowed. Irritating to skin. Risk of serious damage to eyes.

Combustible. Target organ(s): Kidneys.

HMIS RATING

HEALTH: 2*

FLAMMABILITY: 2

REACTIVITY: 0

NFPA RATING

HEALTH: 2

FLAMMABILITY: 2

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. Do not induce vomiting.

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

186.8 °F 86 °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 self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP

Cover with dry lime or soda ash, pick up, keep in a closed container, and hold for waste 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. Keep away from heat and open flame. Store in a cool dry place.

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS

Safety shower and eye bath. 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). 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.

Other: Faceshield (8-inch minimum).

GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Discard contaminated shoes. Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties

Appearance	Physical State: Clear liquid Color: Colorless	
Property	Value	At Temperature or Pressure
Molecular Weight	122.17 AMU	
pH	N/A	
BP/BP Range	200.0 - 203.0 °C	
MP/MP Range	20 °C	
Freezing Point	N/A	
Vapor Pressure	0.1 mmHg	20 °C
Vapor Density	4.21 g/l	
Saturated Vapor Conc.	N/A	
SG/Density	1.01 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	Log Kow: 1.42	
Decomposition Temp.	N/A	
Flash Point	186.8 °F 86 °C	Method: closed cup
Explosion Limits	N/A	
Flammability	N/A	
Autoignition Temp	N/A	
Refractive Index	1.528	
Optical Rotation	N/A	
Miscellaneous Data	N/A	
Solubility	Solubility in Water: Soluble. Other Solvents: 29 G/L (20 °C)	

N/A = not available

Section 10 - Stability and Reactivity

STABILITY

Stable: Stable.

Materials to Avoid: Strong acids, 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.

Eye Contact: Causes severe 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)

Kidneys.

SIGNS AND SYMPTOMS OF EXPOSURE

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

TOXICITY DATA

Skin

Rabbit

2,500 mg/kg

LD50

Oral

Rat

400 mg/kg

LD50

Oral

Mouse

558 mg/kg

LD50

Remarks: Lungs, Thorax, or Respiration:Respiratory depression.

Behavioral:Somnolence (general depressed activity).

Subcutaneous

Mouse

250 MG/KG

LD50

Skin

Guinea pig

>15 ML/KG

LD50

IRRITATION DATA

Skin
Rabbit
10 mg
24H
Remarks: Open irritation test

Skin
Rabbit
500 mg
24H
Remarks: Moderate irritation effect

Eyes
Rabbit
2 mg
Remarks: Severe irritation effect

CHRONIC EXPOSURE - CARCINOGEN

Result: This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

Species: Rat
Route of Application: Oral
Dose: 386 GM/KG
Exposure Time: 2Y
Frequency: C
Result: Kidney, Ureter, Bladder:Kidney tumors.
Tumorigenic:Neoplastic by RTECS criteria.

NTP CARCINOGEN LIST

Rating: Some evidence.
Species: Rat
Route: Gavage

CHRONIC EXPOSURE - MUTAGEN

Species: Mouse
Dose: 250 MG/KG
Cell Type: lymphocyte
Mutation test: Mutation in mammalian somatic cells.

Species: Hamster
Dose: 1 GM/L
Cell Type: ovary
Mutation test: Cytogenetic analysis

Section 12 - Ecological Information

ACUTE ECOTOXICITY TESTS

Test Type: LC50 Fish
Species: Leuciscus idus
Time: 48 h
Value: 345 mg/l

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: alpha-Methylbenzyl alcohol
UN#: 2937
Class: 6.1
Packing Group: Packing Group III
Hazard Label: Toxic Substance
PIH: Not PIH

IATA

Proper Shipping Name: alpha-Methylbenzyl alcohol
IATA UN Number: 2937
Hazard Class: 6.1
Packing Group: III

Section 15 - Regulatory Information

EU ADDITIONAL CLASSIFICATION

Symbol of Danger: Xn
Indication of Danger: Harmful.
R: 22-38-41
Risk Statements: Harmful if swallowed. Irritating to skin. Risk of serious damage to eyes.
S: 26-39
Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear eye/face protection.

US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Toxic (USA) Harmful (EU).
Risk Statements: Harmful if swallowed. Irritating to skin. Risk of serious damage to eyes.
Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear eye/face protection.
US Statements: Combustible. Target organ(s): Kidneys.

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

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