1. PRODUCT AND COMPANY IDENTIFICATION

Product name: 1-Phenylethanol
Product Number: P13800
Brand: Aldrich
Supplier: Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA
Telephone: +1 800-325-5332
Fax: +1 800-325-5052
Emergency Phone # (For both supplier and manufacturer): (314) 778-6555
Preparation Information: Sigma-Aldrich Corporation
Product Safety - Americas Region
1-800-521-8956

2. HAZARDS IDENTIFICATION

Emergency Overview
OSHA Hazards
Combustible Liquid, Target Organ Effect, Toxic by ingestion, Irritant
Other hazards which do not result in classification
May form explosive peroxides.

GHS Classification
Flammable liquids (Category 4)
Acute toxicity, Oral (Category 4)
Acute toxicity, Dermal (Category 5)
Skin irritant (Category 2)
Serious eye damage (Category 1)

GHS Label elements, including precautionary statements
Pictogram
Signal word: Danger
Hazard statement(s)
H227: Combustible liquid
H335: Harmful if swallowed.
H336: May be harmful in contact with skin.
H315: Causes skin irritation.
H318: Causes serious eye damage.
Precautionary statement(s)
P260: Wear protective gloves/ eye protection/ face protection.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

HMIS Classification
Health hazard: 2

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms:
Methyl phenyl carbinoal
Stryanly alcenol
(a)-Methylbenzyl alcohol
Stryene alcenol
(a)-1-Phenylethanol

Formula: C8H10O
Molecular Weight: 122.16 g/mol

Component | Concentration
--- | ---
1-Phenylethanol | <= 100 %

4. FIRST AID MEASURES

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIREFIGHTING MEASURES

Suitable extinguishing media
For small (inopment) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use only a large quantities flooding water may be ineffective. Cool all affected containers with flooding quantities of water.

Special protective equipment for firefighters
Wear self-contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products
Hazardous decomposition products formed under fire conditions. - Carbon oxides

Further information
Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up
Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment
Respiratory protection
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. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CE (EU).

Hand protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: butyl-rubber
Minimum layer thickness: 0.3 mm
Break through time: 480 min

Material tested:Butaject® (KCL 897 / Aldrich Z677647, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.4 mm
Break through time: 30 min

Material tested:Camatri® (KCL 730 / Aldrich Z677442, Size M)

source: KCL GmbH, D-35124 Eschzell, phone +49 (0)6656 67300, e-mail sales@kcl.de, test method: EN274
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Eye protection
Tightly fitting safety goggles. Face shield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection
Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear, liquid</td>
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<tr>
<td>Colour</td>
<td>Colourless</td>
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<tr>
<td>Safety data</td>
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</tr>
<tr>
<td>pH</td>
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</tr>
<tr>
<td>Melting point</td>
<td>19.0°C - 20°C (66 - 68 °F)</td>
</tr>
<tr>
<td>Flash point</td>
<td>86 °C (187 °F) - closed cup</td>
</tr>
<tr>
<td>Ignition temperature</td>
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<tr>
<td>Auto-ignition temperature</td>
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<tr>
<td>Lower explosion limit</td>
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<tr>
<td>Upper explosion limit</td>
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<tr>
<td>Vapour pressure</td>
<td>0.1 hPa (0.1 mmHg) at 20 °C</td>
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<td>Density</td>
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<td>Water solubility</td>
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<td>n-Octanol/water</td>
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<td>Relative vapour density</td>
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<tr>
<td>Odour</td>
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<tr>
<td>Odour Threshold</td>
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<tr>
<td>Evaporation rate</td>
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</table>

10. STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
no data available

Conditions to avoid
Heat, flames and sparks.

Materials to avoid
Strong acids, Strong oxidizing agents

Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity
Oral LD50
LD50 Oral: rat - 460 mg/kg

Inhalation LC50
no data available

Dermal LD50
no data available
LD50 Dermal - rabbit: 2,500 mg/kg
Other Information on acute toxicity
no data available

Skin corrosion/irritation
Skin - rabbit - Skin irritation: 24 h

Serious eye damage/eye irritation
Eyes - rabbit - Severe eye irritation

Respiratory or skin sensitisation
no data available

Germ cell mutagenicity
Genotoxicity in vitro - mouse - lymphocyte
Mutation in mammalian somatic cells.
Genotoxicity in vitro - rat - ovary
Cytogenetic analysis

Carcinogenicity
Carcinogenicity - rat - Oral
This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: No component of this product present at levels grealer than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity
no data available

Teratogenicity
no data available

Specific target organ toxicity - single exposure (Globally Harmonized System)
no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)
no data available

Aspiration hazard
no data available

Signs and Symptoms of Exposure
Cough, Shortness of breath, Headache, Nausea, Vomiting

Synergistic effects
no data available

Additional Information
RTECS: D9275000

12. ECOLOGICAL INFORMATION
Toxicity
Toxicity to fish: LC50 - Leuciscus idus [Golden orfe] - 345 mg/L - 48 h

Persistence and degradability
no data available

Bioaccumulative potential
no data available

Mobility in soil
no data available

PBT and vPvB assessment
no data available

Other adverse effects
no data available

13. DISPOSAL CONSIDERATIONS
Product
This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)
UN number: 2937 Class: 6.1 Packing group: III
Proper shipping name: alpha-Methylbenzyl alcohol, liquid
Marine pollutant: No
Poison Inhalation Hazard: No

IMDG
UN number: 2937 Class: 6.1 Packing group: III EMS-No: F-A, S-A
Proper shipping name: alpha-METHYLBENZYL ALCOHOL, LIQUID Marine pollutant: No

IATA
UN number: 2937 Class: 6.1 Packing group: III
Proper shipping name: alpha-Methylbenzyl alcohol, liquid

15. REGULATORY INFORMATION
OSHA Hazards
Combustible Liquid, Target Organ Effect, Toxic by ingestion, irritant

SARA 302 Components
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards
Fire Hazard, Acute Health Hazard, Chronic Health Hazard
Massachusetts Right To Know Components
No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components
1-Phenylethanol
CAS-No. 98-85-1
Revision Date 2007-03-01

New Jersey Right To Know Components
1-Phenylethanol
CAS-No. 98-85-1
Revision Date 2007-03-01

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION
Further information
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