SECTION 1: Identification of the substance/mixture and of the supplier

Product name: 1-Octanol

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: S25450

Recommended uses of the product and restrictions on use:

Manufacturer Details:
AquaPhoenix Scientific, Inc
9 Barnhart Drive, Hanover, PA 17331
(717) 632-1291

Supplier Details:
Fisher Science Education
6771 Silver Crest Road, Nazareth, PA 18064
(724) 517-1954

Emergency telephone number:
Fisher Science Education Emergency Telephone No.: 800-535-5053

SECTION 2: Hazards identification

Classification of the substance or mixture:

Irritant

Flammable liq. 4
Skin irrit. 2
Eye irrit. 2A
Aquatic AcTox. 3

Signal word: Warning

Hazard statements:
Combustible liquid
Causes skin irritation
Causes serious eye irritation
Harmful to aquatic life with long lasting effects
Harmful to aquatic life

Precautionary statements:
Wash ... thoroughly after handling
Avoid release to the environment
Wear protective gloves/protective clothing/eye protection/face protection
Specific treatment (see supplemental first aid instructions on this label)
Wash contaminated clothing before reuse
IF ON SKIN: Wash with soap and water
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
If skin irritation occurs: Get medical advice/attention
If eye irritation persists get medical advice/attention
Take off contaminated clothing and wash before reuse
Store in a well ventilated place. Keep cool
Dispose of contents/container to ... 

Other Non-GHS Classification:

**WHMIS**

- B3
- D2B

**NFPA/HMIS**

- **Health:** 2
- **Flammability:** 2
- **Physical Hazard:** 0
- **Personal Protection:** X

**SECTION 3 : Composition/information on ingredients**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS 111-87-5</th>
<th>Octan-1-ol</th>
<th>&gt;90 %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percentages are by weight</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SECTION 4 : First aid measures**

**Description of first aid measures**

- **After inhalation:** Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical advice if discomfort or irritation persists.
- **After skin contact:** Wash affected area with soap and water. Rinse/flush exposed skin gently using water for 15-20 minutes. Seek medical attention if irritation persists or if concerned.
- **After eye contact:** Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Seek medical attention if irritation persists or if concerned.
- **After swallowing:** Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists.

**Most important symptoms and effects, both acute and delayed:**

- Irritation, Nausea, Headache, Shortness of breath;

**Indication of any immediate medical attention and special treatment needed:**

- If seeking medical attention, provide SDS document to physician.
SECTION 5 : Firefighting measures

Extinguishing media

Suitable extinguishing agents: Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam. Water spray can keep containers cool. If in a laboratory setting, follow laboratory fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition.

For safety reasons unsuitable extinguishing agents:

Special hazards arising from the substance or mixture:

Combustible liquid and vapor. Vapors are heavier than air and may travel back to the source of ignition and flash back. This liquid floats on water and may travel to a source of ignition and spread fire. Combustion products may include carbon oxides or other toxic vapors.

Advice for firefighters:

Protective equipment: Wear protective eyeware, gloves, and clothing. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment.

Additional information (precautions): Avoid contact with skin, eyes, and clothing. Ensure adequate ventilation. Move product containers away from fire or keep cool with water spray as a protective measure, where feasible.

SECTION 6 : Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Use respiratory protective device against the effects of fumes/dust/aerosol. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources. Protect from heat. Stop the spill, if possible. Contain spilled material by diking or using inert absorbent. Transfer to a disposal or recovery container.

Environmental precautions:

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13.

Methods and material for containment and cleaning up:

If in a laboratory setting, follow Chemical Hygiene Plan procedures. Collect liquids using vacuum or by use of absorbents. Place into properly labeled containers for recovery or disposal. If necessary, use trained response staff/contractor.

Reference to other sections:

SECTION 7 : Handling and storage

Precautions for safe handling:

Prevent formation of aerosols. Follow good hygiene procedures when handling chemical materials. Do not eat, drink, smoke, or use personal products when handling chemical substances. If in a laboratory setting, follow Chemical Hygiene Plan. Use only in well-ventilated areas. Avoid splashes or spray in enclosed areas.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Store away from foodstuffs. Store away from oxidizing agents. Store in cool, dry conditions in well-sealed containers. Keep container tightly sealed. Store with like hazards.

SECTION 8 : Exposure controls/personal protection
Control Parameters: No applicable occupational exposure limits

Appropriate Engineering controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Respiratory protection: Not required under normal conditions of use. Use suitable respiratory protective device when high concentrations are present. Use suitable respiratory protective device when aerosol or mist is formed. For spills, respiratory protection may be advisable.

Protection of skin: The glove material has to be impermeable and resistant to the product/ the substance/ the preparation being used/handled. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Eye protection: Safety glasses with side shields or goggles.

General hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals. Keep away from food, beverages and feed sources. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale gases/fumes/dust/mist/vapor/aerosols. Avoid contact with the eyes and skin.

SECTION 9 : Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance (physical state, color)</td>
<td>Clear, colorless liquid.</td>
</tr>
<tr>
<td>Explosion limit lower</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Explosion limit upper</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Odor</td>
<td>Alcohol</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Vapor density</td>
<td>4.5</td>
</tr>
<tr>
<td>pH-value</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.8240</td>
</tr>
<tr>
<td>Melting/Freezing point</td>
<td>-16°C</td>
</tr>
<tr>
<td>Solubilities</td>
<td>Insoluble in water.</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>195°C</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Flash point (closed cup)</td>
<td>81°C</td>
</tr>
<tr>
<td>Auto/Self-ignition temperature</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>0.007</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Flammability (solid, gaseous)</td>
<td>Flammable</td>
</tr>
<tr>
<td>Viscosity</td>
<td>a. Kinematic: Not Determined</td>
</tr>
<tr>
<td>Density</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Density</td>
<td>Not Determined</td>
</tr>
</tbody>
</table>

SECTION 10 : Stability and reactivity
1-Octanol

Reactivity: Nonreactive under normal conditions.

Chemical stability: No decomposition if used and stored according to specifications.

Possible hazardous reactions: None under normal processing


Hazardous decomposition products: Carbon monoxide. Carbon dioxide. Irritating and highly toxic gases may be generated by thermal decomposition.

SECTION 11 : Toxicological information

Acute Toxicity:

<table>
<thead>
<tr>
<th>Dermal</th>
<th>&gt;5000 mg/kg (Source: IUCLID)</th>
<th>LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>&gt;3200 mg/kg (Source: IUCLID)</td>
<td>LD50 Rat</td>
</tr>
</tbody>
</table>

Chronic Toxicity: No additional information.

Corrosion Irritation: No additional information.

Sensitization: No additional information.

Single Target Organ (STOT): No additional information.

Numerical Measures: No additional information.

Carcinogenicity: No additional information.

Mutagenicity: No additional information.

Reproductive Toxicity: No additional information.

SECTION 12 : Ecological information

Ecotoxicity

- 96 Hr LC50 Oncorhynchus mykiss: 17.68 mg/L [static]
- 96 Hr LC50 Pimephales promelas: 11.4 - 12.9 mg/L [flow-through]

Persistence and degradability: Readily degradable in the environment. Biodegradability aerobic - Exposure time 28 d Result: 92 % - Readily biodegradable

Bioaccumulative potential: Mobility in soil: Aqueous solution has high mobility in soil.

Other adverse effects:

SECTION 13 : Disposal considerations

Waste disposal recommendations:

Product/containers must not be disposed together with household garbage. Do not allow product to reach sewage system or open water. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Consult federal state/provincial and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product.

SECTION 14 : Transport information
UN-Number
1993

UN proper shipping name
Combustible liquid, n.o.s. ( Octan - 1 - ol )

Transport hazard class(es)

Packing group: III

Environmental hazard:

Transport in bulk:

Special precautions for user:

SECTION 15 : Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):
Acute, Chronic, Fire

SARA Section 313 (Specific toxic chemical listings):
None of the ingredients is listed

RCRA (hazardous waste code):
None of the ingredients is listed

TSCA (Toxic Substances Control Act):
All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):
None of the ingredients is listed

Proposition 65 (California):

Chemicals known to cause cancer:
None of the ingredients is listed

Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed

Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed

Chemicals known to cause developmental toxicity:
None of the ingredients is listed

Canada

Canadian Domestic Substances List (DSL):
All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):
None of the ingredients is listed

Canadian NPRI Ingredient Disclosure list (limit 1%):
None of the ingredients is listed

SECTION 16 : Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the
1-Octanol

SDS contains all the information required by the Controlled Products Regulations. Note: The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

**GHS Full Text Phrases:**

**Abbreviations and acronyms:**
- IMDG: International Maritime Code for Dangerous Goods
- PNEC: Predicted No-Effect Concentration (REACH)
- CFR: Code of Federal Regulations (USA)
- SARA: Superfund Amendments and Reauthorization Act (USA)
- RCRA: Resource Conservation and Recovery Act (USA)
- TSCA: Toxic Substances Control Act (USA)
- NPRI: National Pollutant Release Inventory (Canada)
- DOT: US Department of Transportation
- IATA: International Air Transport Association
- GHS: Globally Harmonized System of Classification and Labelling of Chemicals
- ACGIH: American Conference of Governmental Industrial Hygienists
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- NFPA: National Fire Protection Association (USA)
- HMIS: Hazardous Materials Identification System (USA)
- WHMIS: Workplace Hazardous Materials Information System (Canada)
- DNEL: Derived No-Effect Level (REACH)

**Effective date:** 12.24.2014
**Last updated:** 05.08.2015