MATERIAL SAFETY DATA SHEET
Octanol, 2-

1. IDENTIFICATION OF SUBSTANCE / MIXTURE AND OF SUPPLIER
Product Identifier: High Purity Chemicals
Synonyms: Capryl alcohol, 2-Hydroxyoctane, Methyl Hexyl Carbinol, sec-n-Octyl Alcohol, Octanol; ethylpentylcarbinol
Other means of identification: CAS No. 123-96-6
EINECS No. 204-667-0
Recommended use of the chemical and restrictions on use:
Commonly used in the fragrance industry
Supplier Details:
Pharmco Products, Inc.
1101 Isaac Shelby Drive, Shelbyville, KY 40065, USA.
Tel: 502.232.7600
Fax: 502.633.6100
CCN17213

Pharmco Products, Inc.
58 Vale Road, Brookfield, CT 06804, USA.
Tel: 203.740.3471
Fax: 203.740.3481
CCN17213

Emergency Contact: CHEMTREC: 1.800.424.9300 (USA) / +1.703.527.3887 (International)

2. HAZARDS IDENTIFICATION
OSHA Hazards:
Combustible liquid, Irritant, Target organ effect
Target Organs:
Nerves

NFPA

MSDS: 377  Revision Date: 12.11.13  Revision Number: 3.0  Initials: MW
GHS label elements, including precautionary statements

**Signal Word:**
DANGER!

**Hazard statement(s)**
- H227 Combustible liquid
- H315 + H319 Causes skin and serious eye irritation
- H402 Harmful to aquatic life.

**Precautionary statement(s)**
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention.
- P310 Immediately call a POISON CENTER or doctor/physician.
- P280 Wear protective gloves and eye and face protection.

**GHS Classification(s)**
- Acute aquatic toxicity (Category 3)
- Eye irritation (Category 2A)
- Skin irritation (Category 2)

**Other hazards which do not result in classification:**

**Potential Health Effects:**

<table>
<thead>
<tr>
<th>Organ</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyes</td>
<td>Can cause severe irritation to the eyes.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Can cause gastrointestinal irritation with nausea, vomiting and diarrhea. Can cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Inhalation of high concentrations can cause central nervous system effects characterized by headache, dizziness, unconsciousness and coma. Can be irritating to the respiratory tract.</td>
</tr>
<tr>
<td>Skin</td>
<td>Can be irritating to the skin. Can be harmful if absorbed through the skin.</td>
</tr>
<tr>
<td>Chronic</td>
<td>Prolonged or repeated skin contact can lead to defatting and dermatitis.</td>
</tr>
</tbody>
</table>

3. COMPOSITION AND INFORMATION ON INGREDIENTS
4. FIRST AID MEASURES

General advice
Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Skin
Wash skin with soap and copious amounts of water. Seek medical attention.

Inhalation
Remove person to fresh air. If signs/symptoms continue, get medical attention. Give oxygen or artificial respiration as needed.

Eyes
Thoroughly flush the eyes with large amounts of clean low-pressure water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation persists, seek medical attention.

Ingestion
DO NOT induce vomiting. If vomiting does occur, have victim lean forward to prevent aspiration. Rinse mouth with water. Seek medical attention. Never give anything by mouth to an unconscious individual.

5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products):
Carbon oxides expected to be the primary hazardous combustion product.

Special protective equipment and precautions for firefighters:
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Keep unopened containers cool by spraying with water.
Flammable Properties
Classification
OSHA/NFPA Class IIIA Combustible Liquid.
Flash point
88 °C (190 °F) - closed cup

6. ACCIDENTAL RELEASE MEASURES
Personal precautions, protective equipment and emergency procedures:
Do not inhale vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental precautions:
Stop leak. Contain spill if possible and safe to do so. Prevent product from entering drains.

Methods and materials for containment and cleaning up:
Contain spill, then collect with an electrically protected vacuum cleaner or by wet-brushing and put the material into a convenient waste disposal container. Keep container closed.

7. HANDLING AND STORAGE
Precautions for safe handling:
Do not get on skin or in eyes. Do not inhale vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge.

Conditions for safe storage, including any incompatibilities:
Keep container tightly closed in a dry and well-ventilated place. Opened containers must be resealed and kept upright to prevent leakage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION
Control parameters, e.g., occupational exposure limit values or biological limit values:

<table>
<thead>
<tr>
<th>Component</th>
<th>Source</th>
<th>Type</th>
<th>Value</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Octanol</td>
<td>/</td>
<td></td>
<td>No exposure limit</td>
<td></td>
</tr>
</tbody>
</table>

Appropriate engineering controls:
Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Individual protection measures, such as 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 CEN (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.

Eye protection:
Use chemical safety goggles and/or a full face shield where splashing is possible. Use equipment approved by appropriate government standards, such as NIOSH (US) or EN166 (EU) Maintain eye wash fountain and quick-drench facilities in work area.

Skin and body protection:
Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

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 (physical state, color, etc.)</td>
<td>Liquid. Colorless, clear.</td>
</tr>
<tr>
<td>Odor</td>
<td>Specific data not available</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Specific data not available</td>
</tr>
<tr>
<td>pH</td>
<td>Specific data not available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>-39 °C (-38 °F)</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>184 °C (363 °F)</td>
</tr>
<tr>
<td>Flash point</td>
<td>88 °C (190 °F) - closed cup</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Specific data not available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Combustible liquid</td>
</tr>
<tr>
<td>Upper / Lower flammability or explosive limits</td>
<td>Specific data not available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>0.323 hPa (0.242 mmHg) at 25 °C (77 °F)</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>4.5 (air = 1)</td>
</tr>
<tr>
<td>Relative Density</td>
<td>0.819 g/mL at 20 °C (68 °F)</td>
</tr>
<tr>
<td>Solubility (ies)</td>
<td>soluble in water</td>
</tr>
<tr>
<td>Partition coefficient n-octanol/water(ies)</td>
<td>log Pow: 2.72</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Specific data not available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Specific data not available</td>
</tr>
<tr>
<td>Formula (2-OCTANOL)</td>
<td>C8H18O</td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Chemical Stability</th>
<th>Stable under recommended storage conditions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possibility of hazardous reactions</td>
<td>No data available</td>
</tr>
<tr>
<td>Conditions to avoid (e.g., static discharge, shock or vibration)</td>
<td>Heat, flames, and sparks.</td>
</tr>
<tr>
<td>Incompatible materials</td>
<td>Strong oxidizing agents</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>Carbon oxides are expected to be, under fire conditions, the primary hazardous decomposition products.</td>
</tr>
</tbody>
</table>

11. TOXICOLOGICAL INFORMATION

- 2-Octanol 123-96-6

**Product Summary:**
No data available for the mutagenic, teratogenic, or reproductive effects of the product. No data available to designate product as an aspiration hazard or to cause specific target organ toxicity through single or repeated exposure.

**Acute Toxicity:**

<table>
<thead>
<tr>
<th></th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Irritation:**

**Eyes**
No data available.

**Respiratory or Skin Sensitization**
No data available

**Skin**
No data available

**Carcinogenicity**
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable 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.

Other Hazards

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12. ECOLOGICAL INFORMATION

- 2-Octanol 123-96-6

Ecotoxicity (aquatic and terrestrial, where available):

Acute Fish Toxicity (2-OCTANOL)

LC50 / 96 hours / Rainbow Trout - 75 mg/L

Persistence and degradability:

No data available

Bioaccumulative potential:

No data available

Other adverse effects:

Can be considered an environmental hazard through improper use or improper disposal.

13. DISPOSAL CONSIDERATIONS

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging:

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.
14. TRANSPORT INFORMATION
Description of waste residues and information on their safe handling and methods of disposal:

<table>
<thead>
<tr>
<th>UN number</th>
<th>Not a dangerous good.</th>
</tr>
</thead>
</table>

**IMDG**
UN-Number: Not a dangerous good.
Marine pollutant: No

**IATA**
UN-Number: Not a dangerous good.

15. REGULATORY INFORMATION
Safety, health and environmental regulations specific for the product in question:

**OSHA Hazards**
Combustible liquid, Irritant, Target organ effect

All ingredients are on the following inventories or are exempted from listing

<table>
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<th>Country</th>
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<tbody>
<tr>
<td>Australia</td>
<td>AICS</td>
</tr>
<tr>
<td>Canada</td>
<td>DSL</td>
</tr>
<tr>
<td>China</td>
<td>IECS</td>
</tr>
<tr>
<td>European Union</td>
<td>EINECS</td>
</tr>
<tr>
<td>Japan</td>
<td>ENCS/ISHL</td>
</tr>
<tr>
<td>Korea</td>
<td>ECL</td>
</tr>
<tr>
<td>New Zealand</td>
<td>NZIoC</td>
</tr>
<tr>
<td>Philippines</td>
<td>PICCS</td>
</tr>
<tr>
<td>United States of America</td>
<td>TSCA</td>
</tr>
</tbody>
</table>

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

**SARA 311/312 Hazards**
Acute Health Hazard
Chronic Health Hazard
Fire Hazard

**CERCLA**
Massachusetts Right To Know Components
No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components
2-Octanol CAS-No. 123-96-6

New Jersey Right To Know Components
2-Octanol CAS-No. 123-96-6

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:
INCLUDING INFORMATION ON PREPARATION AND REVISION OF THE SDS

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