Material Safety Data Sheet

City University of Hong Kong

MSDS 1-DECANOL 0297

PRODUCT INFORMATION

Product Name: 1-Decanol
Chinese Name: 癸醇
Common Synonyms: Decyl Alcohol
Chemical Family: Alcohols
Formula: CH₃(CH₂)₉OH
Formula Wt.: 158.29
CAS No.: 112-30-1
Product Use: Laboratory Reagent

RISK SYMBOL

PHYSICAL DATA
Boiling Point: 232 deg. C (449 deg. F)  
Vapor Pressure (mmHg): 0.01  
(@ 760 mmHg)  
(20 deg. C)
Melting Point: 6 deg. C (42 deg. F)  
Vapor Density (Air=1): 5.5  
(@ 760 mmHg)
Specific Gravity: 0.83  
Solubility(H2O): Negligible (<0.1%)  
(21 deg. C)
Evaporation Rate: N/A
pH: N/A
Odor Threshold (ppm): N/A
Coefficient Water/Oil Distribution: N/A
Appearance & Odor: Colorless viscous liquid. Sweet odor.

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FIRE AND EXPLOSION DATA
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Flash Point (Closed Cup): 82 deg. C (180 deg. F)
Autoignition Temperature: 287 deg. C (550 deg. F)
Flammable Limits: Upper - N/A  Lower - N/A
Fire Extinguishing Media: Use alcohol foam, dry chemical or carbon dioxide. (water may be ineffective.)
Special Fire-Fighting Procedures:
Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece operated in positive pressure mode. Move exposed containers from fire area if it can be done without risk. Use water to keep fire-exposed containers cool.

Unusual Fire & Explosion Hazards: None identified.
Toxic Gases Produced: None identified

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REACTIVITY DATA
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Stability: Stable
Hazardous Polymerization: Will not occur
Conditions To Avoid: Heat, flame, other sources of ignition
Incompatibles: Strong acids, strong oxidizing agents
Decomposition Products: None identified

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HEALTH HAZARD DATA
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Threshold Limit Value (TLV/TWA): Not established
Short-Term Exposure Limit (STEL): Not established
Permissible Exposure Limit (PEL): Not established

The above information is believed to be accurate to the best of our knowledge.
No responsibilities or liabilities are assumed or implied by CITY U for their inaccuracies.
Toxicity Of Components:
Oral Rat LD$_{50}$ For 1-Decanol 4720 mg/kg
Oral Mouse LD$_{50}$ For 1-Decanol 6500 mg/kg
Carcinogenicity: NTP: No IARC: No Z LIST: No OSHA REG: No

Carcinogenicity: None identified.
Reproductive Effects: None identified.
Effects Of Overexposure:
Inhalation: Irritation of mucous membranes
Skin Contact: Irritation, dermatitis
Eye Contact: Permanent eye damage, irritation
Skin Absorption: None identified
Ingestion: None identified
Chronic Effects: None identified

Target Organs: None identified
Medical Conditions Generally Aggravated By Exposure: None identified
Primary Routes Of Entry: None indicated

FIRST AID MEASURES

Ingestion:
If swallowed and the person is conscious, immediately give large amounts of water. Get medical attention.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Prompt action is essential.

Skin Contact: In case of contact, flush skin with water.
Eye Contact: In case of eye contact, immediately flush with plenty of water for at least 15 minutes.

PREVENTATIVE MEASURES

Ventilation:
Use adequate general or local exhaust ventilation to keep vapor and mist levels as low as possible.
Respiratory Protection:
None required where adequate ventilation conditions exist. If airborne concentration is high, a chemical cartridge respirator with organic vapor cartridge is recommended. If concentration exceeds capacity of cartridge respirator, a self-contained breathing apparatus is advised.

Eye/Skin Protection: Safety goggles, uniform, apron, rubber gloves are recommended.

Storage Requirements:
Keep container tightly closed. Store in a cool, dry, well-ventilated, flammable liquid storage area or cabinet.

ENVIRONMENTAL PROTECTION DATA

Steps To Be Taken In The Event Of A Spill Or Discharge:
Wear self-contained breathing apparatus and full protective clothing. Shut off ignition sources; no flares, smoking or flames in area. Stop leak if you can do so without risk. Use water spray to reduce vapors. Take up with sand or other non-combustible absorbent material and place into container for later disposal. Flush area with water.