

Material Safety Data Sheet

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Version 1.4
According to 91/155/EEC

Classified as Hazardous according to the criteria of EU Annex 1 and NOHSC.

1 - Product and Company Information

Product Name	1-OCTENE, 98%
Product Number	04806
Company	Sigma-Aldrich Pty. Ltd. 12 Anella Avenue Castle Hill NSW 2154
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2 - Composition/Information on Ingredients

Product Name	CAS #	EC no	Annex I Index Number	
1-OCTENE	111-66-0	203-893-7	None	
Ingredient Name 1-OCTENE	Percent 97	CAS # 111-66-0	EC no None	Annex I None
2-ETHYL-1-HEXENE	2.2	1632-16-2	None	None
Formula C8H16				
Molecular Weight 112.22 AMU				

3 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT

Highly flammable. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Harmful: may cause lung damage if swallowed.

4 - First Aid Measures

AFTER INHALATION

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

AFTER SKIN CONTACT

In case of contact, immediately wash skin with soap and copious amounts of water.

AFTER EYE CONTACT

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

AFTER INGESTION

If swallowed, do not induce vomiting; call a physician

immediately.

GENERAL INFORMATION

Contamination of the eyes should be treated by immediate and prolonged irrigation with copious amounts of water.

5 - Fire Fighting Measures

EXTINGUISHING MEDIA

Suitable: Carbon dioxide, dry chemical powder, or appropriate foam.

Unsuitable: Carbon Dioxide, dry chemical powder, or appropriate foam. Water can be applied as a spray or fog and if properly applied is capable of extinguishing the fire by sweeping the flames off the surface of the burning liquid.

SPECIAL RISKS

Specific Hazard(s): Flammable liquid. Emits toxic fumes under fire conditions.

Explosion Hazards: Vapor may travel considerable distance to source of ignition and flash back. Container explosion may occur under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6 - Accidental Release Measures

PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area. Shut off all sources of ignition. Use nonsparking tools.

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, sand, or soda ash. Place in covered containers using non-sparking tools and transport outdoors. Ventilate area and wash spill site after material pickup is complete.

7 - Handling and Storage

HANDLING

Directions for Safe Handling: Do not breathe vapor. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

STORAGE

Conditions of Storage: Keep tightly closed. Keep away from heat, sparks, and open flame.

8 - Exposure Controls / Personal Protection

ENGINEERING CONTROLS

Safety shower and eye bath. Use nonsparking tools. Mechanical exhaust required.

GENERAL HYGIENE MEASURES

Remove and wash contaminated clothing promptly. Wash thoroughly

after handling.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Government approved respirator.
Hand Protection: Compatible chemical-resistant gloves.
Eye Protection: Chemical safety goggles.

9 - Physical and Chemical Properties

Appearance	Physical State: Clear liquid Color: Colorless	
Property	Value	At Temperature or Pressure
pH	N/A	
BP/BP Range	121 - 122 °C	
MP/MP Range	-101 °C	
Flash Point	21 °C	Method: closed cup
Flammability	N/A	
Autoignition Temp	230 °C	
Oxidizing Properties	N/A	
Explosive Properties	N/A	
Explosion Limits	Lower: 0.7 % Upper: 3.9 %	
Vapor Pressure	34 mmHg	38 °C
SG/Density	0.715 g/cm3	
Partition Coefficient	Log Kow: 4.57	
Viscosity	0.27 Pas	
Vapor Density	3.9 g/l	
Saturated Vapor Conc.	N/A	
Evaporation Rate	N/A	
Bulk Density	N/A	
Decomposition Temp.	N/A	
Solvent Content	N/A	
Water Content	N/A	
Surface Tension	N/A	
Conductivity	N/A	
Miscellaneous Data	N/A	
Solubility	Solubility in Water: Insoluble. Other Solvents: HYDROCARBON SOLVENTS-SOLUBLE	

10 - Stability and Reactivity

STABILITY

Stable: Stable.
Materials to Avoid: Acids, Oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

11 - Toxicological Information

ACUTE TOXICITY

LD50
Oral
Rat
> 10,000 mg/kg
LC50
Inhalation

Rat
8,050 ppm
4 HR
LD50
Skin
Rabbit
> 10,000 mg/kg

SENSITIZATION

Sensitization: Will not occur

SIGNS AND SYMPTOMS OF EXPOSURE

Prolonged or repeated contact with skin can cause defatting and dermatitis. Contact with eyes can cause redness, tearing, and blurred vision. Ingestion may cause gastrointestinal irritation. Aspiration or inhalation may cause chemical pneumonitis. Exposure can cause: Headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.

ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.
Skin Absorption: May be harmful if absorbed through the skin.
Eye Contact: May cause eye irritation.
Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.
Ingestion: Harmful if swallowed.

12 - Ecological Information

BIOACCUMULATION POTENTIAL: Indication of bioaccumulation.

ECOTOXICOLOGICAL EFFECTS

Test Type: EC50 Daphnia
Species: Daphnia magna
Time: 48 h
Value: > 3.2 - < 1 mg/l

Test Type: LC50 Fish
Species: Brachydanio rerio
Time: 96 h
Value: 4.8 mg/l

13 - Disposal Considerations

SUBSTANCE DISPOSAL

Contact a licensed professional waste disposal service to dispose of this material. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations.

14 - Transport Information

RID/ADR

UN#: 3295
Class: 3
PG: II
Proper Shipping Name: Hydrocarbons, liquid, n.o.s.

IMDG

UN#: 3295
Class: 3
PG: II
Proper Shipping Name: Hydrocarbons, liquid, n.o.s.
Marine Pollutant: No
Severe Marine Pollutant: No
Technical Name: Required

IATA

UN#: 3295
Class: 3
PG: II
Proper Shipping Name: Hydrocarbons, liquid, n.o.s.
Inhalation Packing Group I: No
Technical Name: Required

15 - Regulatory Information

CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

INDICATION OF DANGER: F Xn N

Highly Flammable. Harmful. Dangerous for the environment.

R-PHRASES: 11 51/53 65

Highly flammable. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Harmful: may cause lung damage if swallowed.

S-PHRASES: 16 60 62

Keep away from sources of ignition - no smoking. This material and its container must be disposed of as hazardous waste. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

COUNTRY SPECIFIC INFORMATION

Germany

WGK: 1

16 - Other Information

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 information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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