



SILVER FERN CHEMICAL

Material Safety Data Sheet

2-ETHYL-1-HEXANOL

SECTION 1: IDENTIFICATION

Product Name: 2-Ethyl-1-hexanol

CAS Number: 104-76-7

Chemical Name: 2-Ethyl-1-hexanol

Chemical Formula: CH₃(CH₂)₃CH(CH₂CH₃)CH₂OH

Synonyms: 1-Hexanol, 2'ethyl; octyl alcohol

Company

Silver Fern Chemical, Inc.
2226 Queen Anne Avenue North
Suite #C
Seattle WA 98109, USA

Business Contact

Customer Service: 206-282-3376
info@silverfernchemical.com

24 Hour Emergency Contact

Infotrac 800-535-5053
Outside USA & Canada 352-323-3500

SECTION 2: HAZARD IDENTIFICATION

Emergency Overview

WARNING! HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. VAPORS AND MISTS SEVERELY IRRITATE THE EYES AND RESPIRATORY TRACT, ESPECIALLY WHEN HEATED. MAY AFFECT CENTRAL NERVOUS SYSTEM. MAY CAUSE ALLERGIC SKIN REACTION. COMBUSTIBLE LIQUID AND VAPOR.

SAF-T-DATA^(tm) Ratings (Provided here for your convenience)

Health Rating: 1 - Slight

Flammability Rating: 2 - Moderate

Reactivity Rating: 1 - Slight

Contact Rating: 2 - Moderate

Lab Protective Equip: GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES; CLASS B EXTINGUISHER.

Storage Color Code: Red (Flammable)



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Potential Health Effects

Inhalation:

Inhalation of vapor or mist is irritating to the respiratory tract. Symptoms include coughing and shortness of breath. High air concentrations are unlikely due to the low vapor pressure.

Ingestion:

Harmful if swallowed. May cause headache, nausea, weakness, dizziness, and central nervous system depression.

Skin Contact:

Causes skin irritation. May be absorbed through skin. May cause sensitization or allergic skin reaction in some individuals.

Eye Contact:

Causes irritation, redness, and pain.

Chronic Exposure:

Prolonged or repeated skin exposure may cause sensitization.

Aggravation of Pre-existing Conditions:

No information found.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS No	Percent	Hazardous
2-Ethyl-1-hexanol	104-76-7	100%	Yes

SECTION 4: FIRST AID MEASURES

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion:

Give large amounts of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.

Skin Contact:

Remove any contaminated clothing. Wash skin with soap or mild detergent and water for at least 15 minutes. Wash clothes before reuse. Get medical attention if irritation develops or persists.

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.



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SECTION 5: FIRE FIGHTING MEASURES

Fire:

Flash point: 81C (178F)

Autoignition temperature: 231C (448F)

Flammable limits in air % by volume:

lcl: 0.88; ucl: 9.7

Combustible Liquid and Vapor!

Explosion:

Above the flash point, explosive vapor-air mixtures may be formed.

Fire Extinguishing Media:

Water spray, dry chemical, alcohol foam, or carbon dioxide. Water may be ineffective.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer!

SECTION 7: HANDLING AND STORAGE

Protect against physical damage. Outside or detached storage is preferred. Inside storage should be in a standard flammable liquids storage room or cabinet. Separate from oxidizing materials. Storage and use areas should be No Smoking areas. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Airborne Exposure Limits:

None established.

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source,



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preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved):

For conditions of use where exposure to the substance is apparent and engineering controls are not feasible, consult an industrial hygienist. For emergencies, or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

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

Eye Protection:

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, colorless liquid.

Odor: Sweet floral (rose-like) odor.

Solubility: Slightly soluble in water.

Specific Gravity: 0.833

pH: No information found.

% Volatiles by volume @ 21C (70F): 100

Boiling Point: 183 - 186C (361 - 367F)

Melting Point: -76C (-105F)

Vapor Density (Air=1): 4.5

Vapor Pressure (mm Hg): 0.36 @ 20C (68F)

Evaporation Rate (BuAc=1): 0.01

SECTION 10: STABILITY AND REACTIVITY

Stability:

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:

Carbon dioxide and carbon monoxide may form when heated to decomposition. May produce acrid smoke and irritating fumes when heated to decomposition.



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Hazardous Polymerization:

Will not occur.

Incompatibilities:

Oxidizers, acids.

Conditions to Avoid:

Heat, ignition sources and incompatibilites.

SECTION 11: TOXICOLOGICAL INFORMATION

Oral rat LD50:3730/kg;

Skin rabbit LD50:1970 mg/Kg;

Irritation data, eye, rabbit: 20mg Severe;

Investigated as a mutagen and a reproductive effector.

-----\Cancer Lists\-----

Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
2-Ethyl-1-hexanol (104-76-7)	No	No	None

SECTION 12: ECOLOGICAL INFORMATION

Environmental Fate: No information found.

Environmental Toxicity: No information found.

SECTION 13: DISPOSAL CONSIDERATIONS

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.

SECTION 14: TRANSPORT INFORMATION

Important Note: *Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.*

DOT (USA)



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Class combustible liquid, Packing group III for quantities of 450 liters (119 gallons) or more; not regulated for smaller quantities

Possible Shipping Description(s):

Combustible liquid, n.o.s. (2-Ethyl Hexanol)
combustible liquid NA 1993 III

Sea - IMDG (International Maritime Dangerous Goods)

Class not regulated

Possible Shipping Description(s):
not regulated

Air - ICAO (International Civil Aviation Organization)

Class not regulated

Possible Shipping Description(s):
not regulated

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

SECTION 15: REGULATORY INFORMATION

-----\Chemical Inventory Status - Part 1\-----

Ingredient	TSCA	EC	Japan	Australia
2-Ethyl-1-hexanol (104-76-7)	Yes	Yes	Yes	Yes

-----\Chemical Inventory Status - Part 2\-----

Ingredient	Korea	--Canada--		Phil.
		DSL	NDSL	
2-Ethyl-1-hexanol (104-76-7)	Yes	Yes	No	Yes

-----\Federal, State & International Regulations - Part 1\-----

Ingredient	-SARA 302-		-----SARA 313-----	
	RQ	TPQ	List	Chemical Catg.
2-Ethyl-1-hexanol (104-76-7)	No	No	No	No



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-----Federal, State & International Regulations - Part 2\-----

Ingredient	CERCLA	-RCRA- 261.33	-TSCA- 8(d)
2-Ethyl-1-hexanol (104-76-7)	No	No	No

Chemical Weapons Convention: No

TSCA 12(b): No

CDTA: Yes

SARA 311/312: Acute: Yes Chronic: Yes Fire: Yes Pressure: No Reactivity: No (Pure / Liquid)

Australian Hazchem Code: None allocated.

Poison Schedule: None allocated.

WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

SECTION 16: OTHER INFORMATION

NFPA Ratings: Health: 1 Flammability: 2 Reactivity: 0

Label Hazard Warning:

WARNING! HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. VAPORS AND MISTS SEVERELY IRRITATE THE EYES AND RESPIRATORY TRACT, ESPECIALLY WHEN HEATED. MAY AFFECT CENTRAL NERVOUS SYSTEM. MAY CAUSE ALLERGIC SKIN REACTION. COMBUSTIBLE LIQUID AND VAPOR.

Label Precautions:

Avoid breathing vapor or mist.
Avoid contact with eyes, skin and clothing.
Keep container closed.
Use with adequate ventilation.
Wash thoroughly after handling.
Keep away from heat and flame.



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Label First Aid:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Flush skin with soap or mild detergent and water for at least 15 minutes. Wash contaminated clothing before reuse. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If swallowed, give large amounts of water to drink. Never give anything by mouth to an unconscious person. In all cases call a physician.

Product Use:

Laboratory Reagent.

Revision Information:

No Changes.

Date Created: 7/06/06

Date Last Updated: 10/20/10

DISCLAIMER OF RESPONSIBILITY

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