# Material Safety Data Sheet 2-Ethyl-1-hexanol

## ACC# 59765

# Section 1 - Chemical Product and Company Identification

MSDS Name: 2-Ethyl-1-hexanol

Catalog Numbers: AC118530000, AC118530010, AC118530025, AC118530050

Synonyms: 2-Ethylhexanol.

Company Identification:

Acros Organics N.V.

One Reagent Lane
Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01 For emergencies in the US, call CHEMTREC: 800-424-9300

# Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
104-76-7	2-Ethyl-1-hexanol	99	203-234-3

## Section 3 - Hazards Identification

### **EMERGENCY OVERVIEW**

Appearance: APHA: 10 max liquid. Flash Point: 77 deg C.

**Warning!** Combustible liquid and vapor. Harmful in contact with skin and if swallowed. Eye contact may result in permanent eye damage. Causes eye, skin, and respiratory tract irritation. May cause allergic respiratory reaction.

Target Organs: Blood, kidneys, central nervous system, liver, spleen, respiratory system, eyes, skin.

#### **Potential Health Effects**

**Eye:** Causes eye irritation. Risk of serious damage to eyes.

Skin: Causes skin irritation. Harmful if absorbed through the skin.

**Ingestion:** Harmful if swallowed. May cause irritation of the digestive tract.

Inhalation: Causes respiratory tract irritation. May cause allergic respiratory reaction. May be harmful if

inhaled.

**Chronic:** Prolonged or repeated skin contact may cause dermatitis. May cause liver and kidney damage. Repeated exposure may cause damage to the spleen. Adverse reproductive effects have been reported in animals. Laboratory experiments have resulted in mutagenic effects. Chronic exposure may cause blood effects. Repeated or prolonged exposure may cause allergic reactions in sensitive individuals. Exposure to high concentrations may cause central nervous system depression.

## Section 4 - First Aid Measures

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid imme diately.

**Skin:** Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Do not induce vomiting. Get medical aid immediately. Call a poison control center.

**Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

**Notes to Physician:** Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Will burn if involved in a fire. Combustible liquid and vapor.

**Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or appropriate foam.

**Flash Point:** 77 deg C ( 170.60 deg F)

**Autoignition Temperature:** 270 deg C ( 518.00 deg F)

**Explosion Limits, Lower:**1.1 vol %

**Upper:** 7.4 vol %

NFPA Rating: (estimated) Health: 2; Flammability: 2; Instability: 0

## Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8. **Spills/Leaks:** Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Remove all sources of ignition. Use a spark-proof tool. Do not let this chemical enter the environment.

# Section 7 - Handling and Storage

**Handling:** Use spark-proof tools and explosion proof equipment. Do not get in eyes, on skin, or on clothing. Keep away from heat, sparks and flame. Do not ingest or inhale. Use only in a chemical fume hood.

**Storage:** Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container.

# Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

**Exposure Limits** 

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
2-Ethyl-1-hexanol	none listed	none listed	none listed

OSHA Vacated PELs: 2-Ethyl-1-hexanol: No OSHA Vacated PELs are listed for this chemical.

## **Personal Protective Equipment**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

# Section 9 - Physical and Chemical Properties

Physical State: Liquid Appearance: APHA: 10 max

**Odor:** alcohol-like **pH:** 7 (1 g/L aq.sol.)

Vapor Pressure: 0.36 hPa @ 20 deg C

Vapor Density: 4.5 (air=1) Evaporation Rate:Not available. Viscosity: 10 mPa @ 20 deg C

**Boiling Point:** 184 deg C @ 760 mmHg **Freezing/Melting Point:** -76 deg C

**Decomposition Temperature:**Not available.

**Solubility:** 1 g/L (20°C)

Specific Gravity/Density:0.833 Molecular Formula:C8H18O Molecular Weight:130.23

# Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Incompatible materials, ignition sources, excess heat.

Incompatibilities with Other Materials: Strong oxidizing agents, strong acids, strong bases.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Will not occur.

# Section 11 - Toxicological Information

RTECS#:

**CAS#** 104-76-7: MP0350000

**LD50/LC50:** CAS# 104-76-7:

Draize test, rabbit, eye: 20 mg Severe;

Draize test, rabbit, eye: 20 mg/24H Moderate; Draize test, rabbit, skin: 500 mg/24H Moderate;

Oral, mouse: LD50 = 2500 mg/kg; Oral, rabbit: LD50 = 1180 mg/kg; Oral, rat: LD50 = 3730 mg/kg; Skin, rabbit: LD50 = 1970 mg/kg; Skin, rat: LD50 = >3 gm/kg;

.

### **Carcinogenicity:**

CAS# 104-76-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information found

**Teratogenicity:** Teratogenic effects have occurred in experimental animals.

**Reproductive Effects:** Adverse reproductive effects have occurred in experimental animals. **Mutagenicity:** Mutation in microorganisms: See actual entry in RTECS for complete information.

Neurotoxicity: No information found

**Other Studies:** 

## Section 12 - Ecological Information

**Ecotoxicity:** Fish: Rainbow trout: 32-37 mg/L; 96 h.; LC50Water flea Daphnia: 26-44 mg/L; 24 h; LC50

No data available.

**Environmental:** No information available.

**Physical:** BOD-5: 767 mg/g.BOD-20: 2,180 mg/g.ThBOD: 2,950 mg/g.

**Other:** Do not empty into drains.

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed. RCRA U-Series: None listed.

# Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	Not regulated	Not Regulated

Hazard Class:	
UN Number:	
Packing Group:	

# Section 15 - Regulatory Information

#### **US FEDERAL**

#### **TSCA**

CAS# 104-76-7 is listed on the TSCA inventory.

## **Health & Safety Reporting List**

CAS# 104-76-7: Effective 6/1/87, Sunset 12/19/95

#### **Chemical Test Rules**

CAS# 104-76-7: 40 CFR 799.1645

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

#### **TSCA Significant New Use Rule**

None of the chemicals in this material have a SNUR under TSCA.

## **CERCLA Hazardous Substances and corresponding RQs**

None of the chemicals in this material have an RQ.

## **SARA Section 302 Extremely Hazardous Substances**

None of the chemicals in this product have a TPO.

#### **SARA Codes**

CAS # 104-76-7: immediate, fire.

**Section 313** No chemicals are reportable under Section 313.

#### **Clean Air Act:**

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

#### **Clean Water Act:**

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

#### **OSHA:**

None of the chemicals in this product are considered highly hazardous by OSHA.

#### STATE

CAS# 104-76-7 can be found on the following state right to know lists: Pennsylvania, Massachusetts.

### California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

# European/International Regulations European Labeling in Accordance with EC Directives Hazard Symbols:

XN

#### **Risk Phrases:**

R 21/22 Harmful in contact with skin and if swallowed.

R 37/38 Irritating to respiratory system and skin.

R 41 Risk of serious damage to eyes.

#### **Safety Phrases:**

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

## WGK (Water Danger/Protection)

CAS# 104-76-7: 2

## Canada - DSL/NDSL

CAS# 104-76-7 is listed on Canada's DSL List.

#### **Canada - WHMIS**

This product has a WHMIS classification of B3, D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

## **Canadian Ingredient Disclosure List**

CAS# 104-76-7 is listed on the Canadian Ingredient Disclosure List.

## Section 16 - Additional Information

MSDS Creation Date: 5/04/1999 Revision #6 Date: 2/21/2008

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.