

# Material Safety Data Sheet

## Ethyl butyrate, 99%

ACC# 01389

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Ethyl butyrate, 99%

**Catalog Numbers:** AC118180000, AC118180010, AC118180050, AC118182500

**Synonyms:** Butanoic acid, ethyl ester; Butyric acid, ethyl ester; Butyric ether; Ethyl butanoate; Ethyl n-butyrate.

**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
105-54-4	Ethyl butyrate	99	203-306-4

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: Colorless Liquid. Flash Point: 26 deg C.

**Warning! Flammable liquid and vapor.** Causes eye irritation. Causes respiratory tract irritation. May be absorbed through intact skin. May cause digestive tract irritation. Causes moderate skin irritation.

**Target Organs:** None.

#### Potential Health Effects

**Eye:** Vapors may cause eye irritation.

**Skin:** Causes moderate skin irritation. May be absorbed through the skin.

**Ingestion:** May cause irritation of the digestive tract.

**Inhalation:** Vapors may cause dizziness or suffocation. Vapor or mist is irritating to the mucous membranes and upper respiratory tract.

**Chronic:** No information found.

### Section 4 - First Aid Measures

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

**Skin:** Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**Ingestion:** If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**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. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Will burn if involved in a fire. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. Flammable liquid and vapor.

**Extinguishing Media:** For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

**Flash Point:** 26 deg C ( 78.80 deg F)

**Autoignition Temperature:** 463 deg C ( 865.40 deg F)

**Explosion Limits, Lower:**Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 0; Flammability: 3; Instability: 0

### Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors.

## Section 7 - Handling and Storage

**Handling:** Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Use with adequate ventilation. Wash clothing before reuse. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

**Storage:** Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Ethyl butyrate	none listed	none listed	none listed

**OSHA Vacated PELs:** Ethyl butyrate: 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:** Colorless Liquid

**Odor:** Pineapple Odor

**pH:** Acid

**Vapor Pressure:** 12.8 mm Hg @ 20 C

**Vapor Density:** 4.0 (Air =1)

**Evaporation Rate:**Not available.

**Viscosity:** 0.711 CP @ 15 C

**Boiling Point:** 120 deg C @ 760.00mmHg

**Freezing/Melting Point:**-93.3 deg C

**Decomposition Temperature:**463 deg C

**Solubility:** Soluble.

**Specific Gravity/Density:**.8780g/cm3

**Molecular Formula:**C6H12O2

**Molecular Weight:**116.16

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable at room temperature in closed containers under normal storage and handling conditions.

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

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

**Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide.

**Hazardous Polymerization:** Has not been reported.

## Section 11 - Toxicological Information

### RTECS#:

**CAS#** 105-54-4: ET1660000

### LD50/LC50:

**CAS#** 105-54-4:

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

Oral, rabbit: LD50 = 5228 mg/kg;

Oral, rat: LD50 = 13 gm/kg;

Skin, rabbit: LD50 = >2 gm/kg;

### Carcinogenicity:

**CAS#** 105-54-4: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information available.

**Teratogenicity:** No information available.

**Reproductive Effects:** No information available.

**Mutagenicity:** No information available.

**Neurotoxicity:** No information available.

**Other Studies:****Section 12 - Ecological Information**

**Ecotoxicity:** No data available. Estimate BCF value = 12, based on a log Kow of 1.73. Estimated BCF value = 5, based on experimental water solubility of  $4.9 \times 10^{-3}$  mg/L. Based upon these estimated BCF values, ethyl butyrate will not be expected to bioconcentrate in aquatic organisms. Estimated Koc of 41 has been determined using a recommended regression equation. Based on this value ethyl butyrate will be expected to exhibit very high mobility in soil; therefore, leaching through the soil to groundwater may occur.

**Environmental:** No information available.

**Physical:** No information available.

**Other:** No information available.

**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
<b>Shipping Name:</b>	ETHYL BUTYRATE	ETHYL BUTYRATE
<b>Hazard Class:</b>	3	3
<b>UN Number:</b>	UN1180	UN1180
<b>Packing Group:</b>	III	III
<b>Additional Info:</b>		FLASHPOINT 26C

**Section 15 - Regulatory Information****US FEDERAL****TSCA**

CAS# 105-54-4 is listed on the TSCA inventory.

**Health & Safety Reporting List**

None of the chemicals are on the Health & Safety Reporting List.

**Chemical Test Rules**

None of the chemicals in this product are under a Chemical Test Rule.

**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 TPQ.

**SARA Codes**

CAS # 105-54-4: 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 depleters.

This material does not contain any Class 2 Ozone depleters.

**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# 105-54-4 can be found on the following state right to know lists: New Jersey, 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:**

Not available.

**Risk Phrases:**

R 10 Flammable.

**Safety Phrases:**

S 16 Keep away from sources of ignition - No smoking.

S 33 Take precautionary measures against static discharges.

S 9 Keep container in a well-ventilated place.

**WGK (Water Danger/Protection)**

CAS# 105-54-4: 1

**Canada - DSL/NDSL**

CAS# 105-54-4 is listed on Canada's DSL List.

**Canada - WHMIS**

This product has a WHMIS classification of B2, 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# 105-54-4 is listed on the Canadian Ingredient Disclosure List.

<b>Section 16 - Additional Information</b>
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**MSDS Creation Date:** 11/10/1998

**Revision #3 Date:** 10/03/2005

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