MATERIAL SAFETY DATA SHEET

Section 1 - Chemical Product and Company Identification

MSDS Name: 2-Ethoxyethyl acetate 99%

Catalog Numbers: AC149420000, AC149420025, AC149420050

Synonyms: 2-Ethoxyethyl acetate; Oxitol acetate; Cellosolve acetate; Ethylene glycol monoethyl ether acetate; EGEEA; Ethylene glycol ethyl ether acetate.

Company Identification:	Acros Organics BVBA Janssen Pharmaceuticalaan 3a 2440 Geel, Belgium
Company Identification: (USA)	Acros Organics One Reagent Lane Fair Lawn, NJ 07410
For information in the US, call:	800-ACROS-01
For information in Europe, call:	+32 14 57 52 11
Emergency Number, Europe:	+32 14 57 52 99
Emergency Number US:	201-796-7100
CHEMTREC Phone Number, US:	800-424-9300
CHEMTREC Phone Number, Europe:	703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#:	111-15-9
Chemical Name:	2-Ethoxyethyl acetate
%:	99.0
EINECS#:	203-839-2
Hazard Symbols:	
Risk Phrases:	

CAS#:	7732-18-5
Chemical Name:	Water
%:	< 0.05
EINECS#:	231-791-2
Hazard Symbols:	
Risk Phrases:	

Text for R-phrases: see Section 16

Hazard Symbols: T

Risk Phrases: 60 61 10 20/21/22

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Warning! Flammable liquid and vapor. Causes respiratory tract irritation. May cause skin irritation.

Causes eye irritation. May cause central nervous system depression. May form explosive peroxides. May cause liver and kidney damage. May cause reproductive and fetal effects. May cause blood abnormalities. May be harmful if swallowed, inhaled, or absorbed through the skin. This material has been reported to be susceptible to autoxidation and therefore should be classified as peroxidizable. Possible birth defect hazard. May cause birth defects based on animal data. Target Organs: Blood, kidneys, central nervous system, liver, reproductive system.

Potential Health Effects

Eye: May cause eye irritation. May cause chemical conjunctivitis and corneal damage.

Skin: May cause skin irritation. May be absorbed through the skin. May cause irritation and dermatitis. May cause cyanosis of the extremities.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. Ingestion of large amounts may cause CNS depression.

Inhalation: Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. May cause respiratory tract irritation. Aspiration may lead to pulmonary edema. Vapors may cause dizziness or suffocation. May cause burning sensation in the chest.

Chronic: Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion. Prolonged or repeated skin contact may cause defatting and dermatitis. Chronic exposure may cause reproductive disorders and teratogenic effects.

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: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. 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.

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

Notes to Physician:

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. Flammable Liquid. Can release vapors that form explosive mixtures at temperatures above the flashpoint. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas.

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. In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water.

Autoignition Temperature: 380 deg C (716.00 deg F)

Flash Point: 51 deg C (123.80 deg F)

Explosion Limits: Lower: 1.70 vol %

Explosion 10.10 vol %

Limits: Upper:

NFPA Rating: health: 1; 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. Clean up spills immediately, observing precautions in the Protective Equipment section. 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: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. 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. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Use only with adequate ventilation. Avoid breathing vapor or mist.

Storage: Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Store protected from light and air. Containers should be dated when opened and tested periodically for the presence of peroxides. Should crystals form in a peroxidizable liquid, peroxidation may have occurred and the product should be considered extremely dangerous. In this instance, the container should only be opened remotely by professionals. All peroxidizable substances should be stored away from heat and light and be protected from ignition sources.

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 adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
2-Ethoxyethyl acetate	5 ppm; Skin - potential significant contribution to overall exposure by the cutaneous route	0.5 ppm TWA; 2.7 mg/m3 TWA 500 ppm IDLH	100 ppm TWA; 540 mg/m3 TWA
Water	none listed	none listed	none listed

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OSHA Vacated PELs: 2-Ethoxyethyl acetate: 100 ppm TWA; 540 mg/m3 TWA Water: None listed

Personal Protective Equipment

Eyes: Wear chemical splash goggles.

Skin: Wear appropriate 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
Color: clear, colorless
Odor: ester-like
pH: Not available
Vapor Pressure: 2.34 mm Hg @ 25 deg C
Vapor Density: 4.72 (Air=1)
Evaporation Rate: 0.2
Viscosity: 1.32 cP 20 deg C
Boiling Point: 156 deg C @ 760 mm Hg (312.80°F)
Freezing/Melting Point: -61 deg C (-77.80°F)
Decomposition Temperature: Not available
Solubility in water: Soluble
Specific Gravity/Density: .9750g/cm3
Molecular Formula: C6H12O3
Molecular Weight: 132.16

Section 10 - Stability and Reactivity

Chemical Stability: Under normal storage conditions, peroxidizable compounds can form and accumulate peroxides which may explode when subjected to heat or shock. This material is most hazardous when peroxide levels are concentrated by distillation or evaporation.

Conditions to Avoid: Light, ignition sources, excess heat, exposure to flame, prolonged exposure to air.

Incompatibilities with Other Materials Strong oxidizing agents, strong acids, coatings, nitrates, plastics, rubber.

Hazardous Decomposition Products Carbon monoxide, carbon dioxide.

Hazardous Polymerization Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 111-15-9: KK8225000
CAS# 7732-18-5: ZC0110000

LD50/LC50: RTECS:
CAS# 111-15-9: Dermal, guinea pig: LD50 = >19460 mg/kg;
Draize test, rabbit, eye: 40 mg Moderate;
Inhalation, rabbit: LC50 = >2000 ppm/4H;
Inhalation, rat: LC50 = 12100 mg/m3/8H;
Oral, rabbit: LD50 = 1950 mg/kg;
Oral, rat: LD50 = 2700 mg/kg;
Skin, rabbit: LD50 = 10500 uL/kg;
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RTECS:

CAS# 7732-18-5: Oral, rat: LD50 = >90 mL/kg;
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Carcinogenicity: 2-Ethoxyethyl acetate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Water - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information found

Teratogenicity: No information found

Reproductive: Not available

Neurotoxicity: No information found

Mutagenicity: No information found

Other: Not available

Section 12 - Ecological Information

Ecotoxicity: Fish: Fathead Minnow: LC50 = 42.2 mg/L; 96 Hr.; Flow-through, 25.4-27.4 degrees C, pH6.9-7.7
Fish: Goldfish: LC50 = 160.0 mg/L; 24 Hr.; Unspecified

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
Shipping Name: ETHYLENE GLYCOL MONOETHYL ETHER ACETATE
Hazard Class: 3
UN Number: UN1172
Packing Group: III
Canada TDG
Shipping Name: Not available
Hazard Class:
UN Number:
Packing Group:

Section 15 - Regulatory Information

US Federal

TSCA

CAS# 111-15-9 is listed on the TSCA Inventory.
CAS# 7732-18-5 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	CAS# 111-15-9: Section 5
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	None of the chemicals in this product have a TPQ.

Substances	
SARA Codes	CAS # 111-15-9: acute, chronic, flammable.
Section 313	This material contains 2-Ethoxyethyl acetate (listed as Glycol ethers), 99 0%, (CAS# 111-15-9) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 372.
Clean Air Act:	CAS# 111-15-9 listed as Glycol ethers (except for EGBE) is listed as a hazardous air pollutant (HAP). 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:	
STATE	2-Ethoxyethyl acetate can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts. Water is not present on state lists from CA, PA, MN, MA, FL, or NJ.
California Prop 65	The following statement(s) is(are) made in order to comply with the California Safe Drinking Water Act: WARNING: This product contains 2-Ethoxyethyl acetate, a chemical known to the state of California to cause birth defects or other reproductive harm. WARNING: This product contains 2-Ethoxyethyl acetate, a chemical known to the state of California to cause birth defects or other reproductive harm.
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: T

Risk Phrases:

R 61 May cause harm to the unborn child.

R 10 Flammable.

R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R 60 May impair fertility.

Safety Phrases:

S 53 Avoid exposure - obtain special instructions before use.

S 9 Keep container in a well-ventilated place.

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

S 33 Take precautionary measures against static discharges.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 111-15-9: 1

CAS# 7732-18-5: Not available

Canada

CAS# 111-15-9 is listed on Canada's DSL List

CAS# 7732-18-5 is listed on Canada's DSL List

Canadian WHMIS Classifications: B2, D2B, D2A

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.

CAS# 111-15-9 is listed on Canada's Ingredient Disclosure List

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: 6/07/1999

Revision #4 Date 10/03/2005

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility 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 the company 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 the company has been advised of the possibility of such damages.