# MATERIAL SAFETY DATA SHEET

# **Section 1 - Chemical Product and Company Identification**

**MSDS Name:** 2-Ethoxyethyl acetate 99%

Catalog AC149420000, AC149420025, AC149420050

Numbers:

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

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CAS#: 111-15-9

Chemical Name: 2-Ethoxyethyl acetate

%: 99.0 EINECS#: 203-839-2

Hazard Symbols: Risk Phrases:

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

Hazard Symbols: Risk Phrases:

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Text for R-phrases: see Section 16

Hazard Symbols:



**Risk Phrases:** 60 61 10 20/21/22

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# **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.

May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause central Ingestion:

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 inhalation and ingestion may cause effects similar to those of acute inhalation and Chronic:

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

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and Eyes:

lower eyelids. Get medical aid immediately.

Flush skin with plenty of water for at least 15 minutes while removing contaminated Skin:

clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing

before reuse.

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by Ingestion:

mouth to an unconscious person. Get medical aid.

Get medical aid immediately. Remove from exposure and move to fresh air Inhalation:

immediately. If not breathing, give artificial respiration. If breathing is difficult, give

oxygen.

Notes to Physician:

# Section 5 - Fire Fighting Measures

As in any fire, wear a self-contained breathing apparatus in pressure-demand, General

> 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

Information:

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 380 deg C (716.00 deg F)

Temperature:

Flash Point: 51 deg C ( 123.80 deg F)

Explosion 1.70 vol %

Limits: Lower:

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.

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Chemical Name Final PELs	ACGIH	NIOSH	OSHA -
		-	
	a 5 ppm; Skin -	0.5 ppm TWA; 2.7	100 ppm
	potential	mg/m3 TWA 500	mg/m3
	significant	ppm IDLH	1
	contribution to	1	1
	overall exposure	I	1
	by the cutaneous	I	1
	r oute	I	1
		-	
Water   listed	none listed	none listed	none

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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

Strong oxidizing agents, strong acids, coatings, nitrates, plastics, rubber.

distillation or evaporation.

Carbon monoxide, carbon dioxide.

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

air.

Incompatibilities with

Other Materials

Hazardous

Decomposition

**Products** 

Will not occur.

Hazardous Polymerization

## **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;

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

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

**Use Rule** 

**CERCLA Hazardous** None of the chemicals in this material have an RQ.

Substances and corresponding RQs

**SARA Section 302** None of the chemicals in this product have a TPQ.

**Extremely Hazardous** 

**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

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 Priority Pollutants

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 None of the chemicals in this product are listed.

Level:

**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.