

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Product name: Eastman(TM) PM Acetate

Product No.: EAN 433394. 05372-00, P0537200, P0537201, P0537205, P0537206, P0537208, E0537201

Synonyms, Trade Names: 05372-00

Additional identification

Chemical name: 2-methoxy-1-methylethyl acetate
CAS-No.: 108-65-6

Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Solvent

Uses advised against: None known.

Details of the supplier of the safety data sheet

Manufacturer / Supplier

Eastman Chemical Company
200 South Wilcox Drive
Kingsport, TN 37660-5280 US
+14232292000

Visit our website at www.EASTMAN.com or email emnmsds@eastman.com

Emergency telephone number:

For emergency health, safety, and environmental information, call 1-423-229-4511 or 1-423-229-2000.

For emergency transportation information, in the United States: call CHEMTREC at 800-424-9300 or call 423-229-2000.

SECTION 2: Hazards identification

Hazard classification:

Physical hazards

|| **Flammable liquids** Category 3

OSHA Specified Hazards: not applicable

Warning label items including precautionary statement:

Pictogram:



|| **Signal words:** **WARNING!**

Hazard Statement(s): H226: Flammable liquid and vapor.**Precautionary statement:**

Prevention: P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233: Keep container tightly closed.
P240: Ground/bond container and receiving equipment.
P241: Use explosion-proof electrical/ventilating/lighting/equipment.
P242: Use only non-sparking tools.
P243: Take precautionary measures against static discharge.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response: P370+P378: In case of fire; Use water spray, carbon dioxide, dry chemical or alcohol foam for extinction.
P303+P361+P353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

Storage: P403+P235: Store in a well-ventilated place. Keep cool.

Disposal: P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC):

No data available.

SECTION 3: Composition/information on ingredients**Substances / Mixtures****General information:**

| Chemical name | Concentration | Additional identification | Notes |
|---|---------------|---------------------------|-------|
| propylene glycol monomethyl ether acetate | 100% | CAS-No.: 108-65-6 | # |

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

This substance has workplace exposure limit(s).

SECTION 4: First aid measures**Description of first aid measures**

Inhalation: Move to fresh air. Treat symptomatically. Get medical attention if symptoms persist.

Eye contact: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. In case of irritation from airborne exposure, move to fresh air. Get medical attention if symptoms persist.

Skin contact: Wash with soap and water. Get medical attention if symptoms occur.

Ingestion: Seek medical advice.

Most important symptoms and effects, both acute and delayed: None known.

Indication of any immediate medical attention and special treatment needed

Hazards: None known.

Treatment: Treat symptomatically.

SECTION 5: Firefighting measures

General fire hazards: Flammable liquid and vapor.

Extinguishing media

Suitable extinguishing media: Water spray. Carbon Dioxide. Dry chemical. Alcohol foam.

Unsuitable extinguishing media: None known.

Special hazards arising from the substance or mixture: Forms peroxides of unknown stability. Vapors may cause a flash fire or ignite explosively. Vapors may travel considerable distance to a source of ignition and flash back. Prevent buildup of vapors or gases to explosive concentrations.

Advice for firefighters

Special fire fighting procedures: Water may be ineffective in fighting the fire. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures: Wear appropriate personal protective equipment.

Environmental precautions: Avoid release to the environment.

Methods and material for containment and cleaning up: Eliminate all ignition sources if safe to do so. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Large Spillages: Flush spill area with water spray. Prevent runoff from entering drains, sewers, or streams. Dike for later disposal.

Notification Procedures: In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

SECTION 7: Handling and storage:

| | |
|--|--|
| Precautions for safe handling: | Minimize exposure to air. After opening, purge container with nitrogen before reclosing. Periodically test for peroxide formation on long-term storage. Do not allow to evaporate to near dryness. Do not distill to near dryness. Addition of water or appropriate reducing materials will lessen peroxide formation. |
| Conditions for safe storage, including any incompatibilities: | Keep container tightly closed and in a well-ventilated place. Store away from heat and light. |
| Specific end use(s): | Solvent |

SECTION 8: Exposure controls/personal protection**Control parameters****Occupational exposure limits**

Country specific exposure limits have not been established or are not applicable unless listed below.

| Chemical name | Type | Exposure Limit values | Source |
|---------------------------------|------|-----------------------|--|
| 2-methoxy-1-methylethyl acetate | TWA | 50 ppm | US. AIHA Workplace Environmental Exposure Level (WEEL) Guides (2009) |

Exposure controls

Appropriate engineering controls: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

| | |
|-----------------------------|--|
| General information: | Eye bath. Washing facilities. |
| Eye/face protection: | It is a good industrial hygiene practice to minimize eye contact. |
| Skin protection | |
| Hand protection: | It is a good industrial hygiene practice to minimize skin contact. |
| Other: | No data available. |

Respiratory Protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

Hygiene measures: Observe good industrial hygiene practices.

Environmental Controls: No data available.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance

| | |
|---|--|
| Physical State: | Liquid |
| Form: | Liquid |
| Color: | Colorless |
| Odor: | Sweet |
| Odor Threshold: | Not determined. |
| pH: | No data available. |
| Boiling Point: | 150 °C |
| Flash Point: | 46 °C (Setaflash Closed Cup) |
| Evaporation Rate: | Not determined. |
| Flammability (solid, gas): | No data available. |
| Flammability Limit - Upper (%): | No data available. |
| Flammability Limit - Lower (%): | No data available. |
| Vapor pressure: | Not determined. |
| Vapor density (air=1): | 4.6 |
| Specific Gravity: | 0.969 |
| Solubility(ies) | |
| Solubility in Water: | Appreciable |
| Solubility (other): | No data available. |
| Partition coefficient (n-octanol/water): | Pow: 3.6 log Pow: 0.56 |
| Autoignition Temperature: | No data available. |
| Decomposition Temperature: | (HPDTA) No exotherm to boiling (at 150 psig) |
| Dynamic Viscosity: | 1.07 mPa.s (25 °C) |
| Kinematic viscosity: | Not determined. |
| Explosive properties: | No data available. |
| Oxidizing properties: | No data available. |

Other information

Minimum ignition temperature: 354 °C (ASTM E659)

SECTION 10: Stability and reactivity

| | |
|--|--|
| Reactivity: | None known. |
| Chemical stability: | Stable |
| Possibility of hazardous reactions: | Forms peroxides if material becomes uninhibited. |
| Conditions to avoid: | Heat, sparks, flames. |

| | |
|--|----------------------------------|
| Incompatible materials: | Strong oxidizing agents. |
| Hazardous decomposition products: | Carbon Dioxide. Carbon Monoxide. |

SECTION 11: Toxicological information**Information on likely routes of exposure**

| | |
|----------------------|-------------|
| Inhalation: | None known. |
| Ingestion: | None known. |
| Skin contact: | None known. |
| Eye contact: | None known. |

Information on toxicological effects**Acute Toxicity****Oral**

| | |
|-----------------|--------------------|
| Product: | No data available. |
|-----------------|--------------------|

Specified substance(s)

| | |
|---------------------------------|--------------------------------|
| 2-methoxy-1-methylethyl acetate | Oral LD-50: (Rat): 6,190 mg/kg |
|---------------------------------|--------------------------------|

Dermal

| | |
|-----------------|--------------------|
| Product: | No data available. |
|-----------------|--------------------|

Specified substance(s)

| | |
|---------------------------------|---------------------------------------|
| 2-methoxy-1-methylethyl acetate | Dermal LD-50: (Rabbit): > 5,000 mg/kg |
|---------------------------------|---------------------------------------|

Inhalation

| | |
|-----------------|--------------------|
| Product: | No data available. |
|-----------------|--------------------|

Specified substance(s)

| | |
|---------------------------------|-----------------------------|
| 2-methoxy-1-methylethyl acetate | LC50 (Rat, 6 h): > 4345 ppm |
|---------------------------------|-----------------------------|

Repeated dose toxicity

| | |
|-----------------|--------------------|
| Product: | No data available. |
|-----------------|--------------------|

Specified substance(s)

| | |
|---------------------------------|--------------------|
| 2-methoxy-1-methylethyl acetate | No data available. |
|---------------------------------|--------------------|

Skin corrosion/irritation:

| | |
|-----------------|--------------------|
| Product: | No data available. |
|-----------------|--------------------|

Specified substance(s)

| | |
|---------------------------------|---|
| 2-methoxy-1-methylethyl acetate | (Rabbit, 4 h): none (Rabbit, 24 h): none |
|---------------------------------|---|

Serious eye damage/eye irritation:

| | |
|-----------------|--------------------|
| Product: | No data available. |
|-----------------|--------------------|

Specified substance(s)

2-methoxy-1-methylethyl acetate (Rabbit): very slight

Respiratory or skin sensitization:

Product: No data available.

Specified substance(s)

2-methoxy-1-methylethyl acetate Skin Sensitization:., (Guinea Pig) - non-sensitizing

Mutagenicity

In vitro

Product: No data available.

Specified substance(s)

2-methoxy-1-methylethyl acetate No data available.

In vivo

Product: No data available.

Specified substance(s)

2-methoxy-1-methylethyl acetate No data available.

Carcinogenicity

Product: No data available.

Specified substance(s)

2-methoxy-1-methylethyl acetate No data available.

Reproductive toxicity

Product: No data available.

Specified substance(s)

2-methoxy-1-methylethyl acetate No data available.

Specific target organ toxicity - single exposure

Product: No data available.

Specified substance(s)

2-methoxy-1-methylethyl acetate No data available.

Specific target organ toxicity - repeated exposure

Product: No data available.

Specified substance(s)

2-methoxy-1-methylethyl acetate No data available.

Aspiration hazard

Product: No data available.

Specified substance(s)

2-methoxy-1-methylethyl acetate No data available.

Other adverse effects: No data available.

SECTION 12: Ecological information

Toxicity

Acute toxicity

Fish

Product: No data available.

Specified substance(s)

2-methoxy-1-methylethyl acetate LC-50 (Fathead Minnow, 96 h): 161 mg/l

Aquatic invertebrates

Product: No data available.

Specified substance(s)

2-methoxy-1-methylethyl acetate LC-50 (daphnid, 48 h): 408 mg/l

Chronic Toxicity

Fish

Product: No data available.

Specified substance(s)

2-methoxy-1-methylethyl acetate LC-50 (Oryzias latipes, 14 d): 63.5 mg/l
NOEC (Oryzias latipes, 14 d): 47.5 mg/l

Aquatic invertebrates

Product: No data available.

Specified substance(s)

2-methoxy-1-methylethyl acetate NOEC (daphnid, 21 d): \geq 100 mg/l
EC-50 (daphnid, 21 d): $>$ 100 mg/l

Toxicity to Aquatic Plants

Product: No data available.

Specified substance(s)

2-methoxy-1-methylethyl acetate EC-50 (Selenastrum capricornutum, 96 h): $>$ 1,000 mg/l
NOEC (Selenastrum capricornutum, 96 h): \geq 1,000 mg/l

Persistence and degradability

Biodegradation

Product: No data available.

Specified substance(s)

2-methoxy-1-methylethyl acetate 90 % (28 d, Ready Biodegradability: CO2 Evolution Test) Readily biodegradable

Biological Oxygen Demand:

Product: No data available.

Specified substance(s)

| | |
|---------------------------------|------------------------|
| 2-methoxy-1-methylethyl acetate | 363 mg/g 1,050 mg/g |
|---------------------------------|------------------------|

Chemical Oxygen Demand:

Product No data available.

Specified substance(s)

2-methoxy-1-methylethyl acetate No data available.

BOD/COD ratio

Product No data available.

Specified substance(s)

2-methoxy-1-methylethyl acetate No data available.

Bioaccumulative potential

Product: No data available.

Specified substance(s)

2-methoxy-1-methylethyl acetate No data available.

Mobility in soil:

No data available.

Known or predicted distribution to environmental compartments

2-methoxy-1-methylethyl acetate No data available.

Results of PBT and vPvB assessment:

No data available.

2-methoxy-1-methylethyl acetate

No data available.

Other adverse effects:

No data available.

SECTION 13: Disposal considerations

Waste treatment methods

General information: No data available.

Disposal methods: Dispose of waste and residues in accordance with local authority requirements. Incinerate. Since emptied containers retain product residue, follow label warnings even after container is emptied.

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

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

regulated for smaller quantities

Possible Shipping Description(s):

not regulated

UN 3272 Esters, n.o.s. (propylene glycol monomethyl ether acetate) combustible liquid
III

IMDG - International Maritime Dangerous Goods Code

Possible Shipping Description(s):

UN 3272 ESTERS, N.O.S. (propylene glycol monomethyl ether acetate) 3 III

IATA

Possible Shipping Description(s):

UN 3272 Esters, n.o.s. (propylene glycol monomethyl ether acetate) 3 III

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture:

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

WHMIS (Canada) Status: controlled

WHMIS (Canada) Hazard Classification: B/3

SARA 311-312 Hazard Classification(s):

fire hazard

US EPCRA (SARA Title III) Section 313 - Toxic Chemical List

NONE

OSHA: hazardous

TSCA (US Toxic Substances Control Act): All components of this product are listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act): All components of this product are listed on the DSL. Any impurities present in this product are exempt from listing.

AICS / NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme): All components of this product are listed on AICS or otherwise comply with NICNAS.

MITI (Japanese Handbook of Existing and New Chemical Substances): All components of this product are listed in the Handbook or have been approved in Japan by new substance notification.

ECL (Korean Toxic Substances Control Act): All components of this product are listed on the Korean inventory or otherwise comply with the Korean Toxic Substances Control Act.KE -23315

Philippines Inventory (PICCS) : All components of this product are listed on the Philippine inventory or otherwise comply with PICCS.

Inventory of Existing Chemical Substances in China: All components of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).

SECTION 16: Other information

HMIS® Hazard Ratings: Health - 1, Flammability - 2, Chemical Reactivity - 1

HMIS® rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

Revision Information: Not relevant.

Key literature references and sources for data: No data available.

Training information: No data available.

Issue date: 05/09/2014

SDS No.:

Disclaimer: This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.