

SAFETY DATA SHEET

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

Product identifier

Product name: Eastman(TM) Methyl Acetate

Product No.: EAN 900520. 09051-00, P0905105, E0905101, P0905106, P0905107, P0905108, P0905100

Additional identification

Chemical name: methyl acetate

CAS-No.: 79-20-9

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 2

Health Hazards

Serious Eye Damage/Eye Irritation Category 2A

Specific Target Organ Toxicity -
Single Exposure Category 3

OSHA Specified Hazards: not applicable

Warning label items including precautionary statement:

Pictogram:



Signal Words: DANGER!

Hazard Statement(s): H225: Highly flammable liquid and vapor.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.
H336: May cause drowsiness or dizziness.

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.
P243: Take precautionary measures against static discharge.
P280: Wear protective gloves/protective clothing.
P264: Wash hands thoroughly after handling.
P261: Avoid breathing dust/fume/gas/mist.
P271: Use only outdoors or in a well-ventilated area.

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.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312: Call a POISON CENTER or doctor/physician if you feel unwell.

Storage: P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P233: Keep container tightly closed.
P405: Store locked up.

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): None known.

SECTION 3: Composition/information on ingredients

Substances / Mixtures

General information:

| Chemical name | Concentration | Additional identification | Notes |
|----------------|---------------|---------------------------|-------|
| methyl acetate | >96% | CAS-No.: 79-20-9 | # |
| methanol | <2.5% | CAS-No.: 67-56-1 | # |
| water | <1.5% | CAS-No.: 7732-18-5 | |

* 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. Get medical attention. Treat symptomatically.
- Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.
- Skin Contact:** Wash with soap and water. Get medical attention if symptoms persist. Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.
- Ingestion:** Call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed: May irritate and cause redness and pain. Narcotic effect.

Indication of any immediate medical attention and special treatment needed

- Hazards:** Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea.
- Treatment:** Treat symptomatically.

SECTION 5: Firefighting measures

General Fire Hazards: Extremely flammable liquid and vapor - vapor may cause flash fire. USE WATER WITH CAUTION. Material will float and may ignite on surface of water.

Extinguishing media

- Suitable extinguishing media:** Water spray. Dry chemical. Carbon Dioxide. Alcohol foam.
- Unsuitable extinguishing media:** None known.

Special hazards arising from the substance or mixture: 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 sources of ignition. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Large Spillages: Use water spray to disperse vapors and dilute spill to a nonflammable mixture. 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: Avoid breathing mists or vapors. Avoid contact with eyes and prolonged or repeated contact with skin. Do not taste or swallow. Use only with adequate ventilation. Wash thoroughly after handling. Keep away from heat, sparks and open flame.

Conditions for safe storage, including any incompatibilities: Keep container tightly closed and in a well-ventilated place. Keep away from heat, sparks and open flame.

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 |
|----------------|------|-----------------------|---|
| methyl acetate | TWA | 200 ppm | US. ACGIH Threshold Limit Values (01 2010) |
| | STEL | 250 ppm | US. ACGIH Threshold Limit Values (01 2010) |
| | PEL | 200 ppm 610 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| methanol | TWA | 200 ppm | US. ACGIH Threshold Limit Values (01 2010) |
| | STEL | 250 ppm | US. ACGIH Threshold Limit Values (01 2010) |
| | PEL | 200 ppm 260 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |

Biological Limit Values

| Chemical name | Exposure Limit Values | Source |
|--|-----------------------|---------------------|
| methanol (methanol: Sampling time: End of shift.) | 15 mg/l (Urine) | ACGIH BEL (01 2010) |

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. Safety shower.

Eye/face protection: Wear safety glasses with side shields (or goggles). Wear a full-face respirator, if needed.

Skin protection

Hand Protection: Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

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. Wear a full-face positive-pressure air-supplied respirator.

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: pleasant
Odor Threshold: 4.6 ppm
pH: No data available.

| | |
|---|----------------------------------|
| Freezing Point: | -99 °C |
| Boiling Point: | 55.8 - 58.2 °C |
| Flash Point: | -13 °C (Tag closed cup) |
| Evaporation Rate: | 5.3 |
| Flammability (solid, gas): | No data available. |
| Flammability Limit - Upper (%)-: | No data available. |
| Flammability Limit - Lower (%)-: | No data available. |
| Vapor pressure: | 228.3 mbar (20 °C) |
| Vapor density (air=1): | 2.6 |
| Specific Gravity: | 0.934 (20 °C) |
| Solubility(ies) | |
| Solubility in Water: | Appreciable |
| Solubility (other): | No data available. |
| Partition coefficient (n-octanol/water): | Pow: 1.51 log Pow: 0.18 |
| Autoignition Temperature: | 502 °C (method unspecified) |
| Decomposition Temperature: | (DTA) No exotherm |
| Dynamic Viscosity: | 0.38 mPa.s (20 °C) |
| Kinematic viscosity: | 0.406 mm ² /s (20 °C) |
| Explosive properties: | No data available. |
| Oxidizing properties: | No data available. |

SECTION 10: Stability and reactivity

| | |
|--|----------------------------------|
| Reactivity: | None known. |
| Chemical Stability: | Stable |
| Possibility of Hazardous Reactions: | None known. |
| 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: | May cause respiratory irritation. May cause drowsiness or dizziness. |
| Ingestion: | None known. |
| Skin Contact: | None known. |
| Eye contact: | Causes serious eye damage. |

Information on toxicological effects

Acute Toxicity

Oral

Product: No data available.

Specified substance(s)

methyl acetate Oral LD-50: (Rat): 6,482 mg/kg (highest dose tested)
 methanol Oral LD-50: (Rat): 5,600 mg/kg
 water No data available.

Dermal

Product: No data available.

Specified substance(s)

methyl acetate Dermal LD-50: (Rabbit): > 2,000 mg/kg (highest dose tested)
 methanol Dermal LD-50: (Rabbit): 17,100 mg/kg
 water No data available.

Inhalation

Product: No data available.

Specified substance(s)

methyl acetate LC50 (Rat, 4 h): > 49 mg/l
 methanol LC50 (Rat, 4 h): 64000 ppm
 water No data available.

Repeated Dose Toxicity

Product: No data available.

Specified substance(s)

methyl acetate No data available.
 methanol No data available.
 water No data available.

Skin Corrosion/Irritation:

Product: No data available.

Specified substance(s)

methyl acetate (Rabbit, 24 h): Slight
 methanol (Rabbit, 72 h): none
 water No data available.

Serious Eye Damage/Eye Irritation:

Product: No data available.

Specified substance(s)

methyl acetate (Rabbit): moderate
 methanol (Rabbit): slight to moderate
 water No data available.

Respiratory or Skin Sensitization:

Product: No data available.

Specified substance(s)

| | |
|----------------|---|
| methyl acetate | Skin Sensitization:, (Human) - non-sensitizing |
| methanol | Skin Sensitization:, (Guinea Pig) - non-sensitizing |
| water | No data available. |

Mutagenicity

In vitro

Product: No data available.

Specified substance(s)

| | |
|----------------|--------------------|
| methyl acetate | No data available. |
| methanol | No data available. |
| water | No data available. |

In vivo

Product: No data available.

Specified substance(s)

| | |
|----------------|--------------------|
| methyl acetate | No data available. |
| methanol | No data available. |
| water | No data available. |

Carcinogenicity

Product: No data available.

Specified substance(s)

| | |
|----------------|--------------------|
| methyl acetate | No data available. |
| methanol | No data available. |
| water | No data available. |

Reproductive Toxicity

Product: No data available.

Specified substance(s)

| | |
|----------------|--------------------|
| methyl acetate | No data available. |
| methanol | No data available. |
| water | No data available. |

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specified substance(s)

| | |
|----------------|--|
| methyl acetate | No data available. |
| methanol | Oral Dermal Inhalation: Eye, Central nervous system. |
| water | No data available. |

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Specified substance(s)

| | |
|----------------|--------------------|
| methyl acetate | No data available. |
| methanol | No data available. |
| water | No data available. |

Aspiration Hazard

| | |
|-------------------------------|--------------------|
| Product: | No data available. |
| Specified substance(s) | |
| methyl acetate | No data available. |
| methanol | No data available. |
| water | No data available. |
| Other Adverse Effects: | No data available. |

SECTION 12: Ecological information

Toxicity

Acute toxicity

Fish

| | |
|-------------------------------|--|
| Product: | No data available. |
| Specified substance(s) | |
| methyl acetate | LC-50 (Fathead Minnow, 96 h): 320 - 399 mg/l |
| methanol | LC-50 (Bluegill Sunfish, 96 h): 15,400 mg/l |
| water | No data available. |

Aquatic Invertebrates

| | |
|-------------------------------|--|
| Product: | No data available. |
| Specified substance(s) | |
| methyl acetate | EC-50 (daphnid, 48 h): 1,027 mg/l |
| methanol | EC-50 (Daphnia magna, 48 h): > 10,000 mg/l |
| water | No data available. |

Chronic Toxicity

Fish

| | |
|-------------------------------|--------------------|
| Product: | No data available. |
| Specified substance(s) | |
| methyl acetate | No data available. |
| methanol | No data available. |
| water | No data available. |

Aquatic Invertebrates

| | |
|-------------------------------|--------------------|
| Product: | No data available. |
| Specified substance(s) | |
| methyl acetate | No data available. |
| methanol | No data available. |
| water | No data available. |

Toxicity to Aquatic Plants

| | |
|-------------------------------|--|
| Product: | No data available. |
| Specified substance(s) | |
| methyl acetate | EC-50 (Selenastrum capricornutum, 72 h): > 120 mg/l |
| methanol | EC-50 (Algae (Pseudokirchneriella subcapitata), 96 h): 22,000 mg/l |
| water | No data available. |

Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s)

methyl acetate 70 % (28 d)
 methanol 95 % (20 d)
 water No data available.

Biological Oxygen Demand:

Product No data available.

Specified substance(s)

methyl acetate No data available.
 methanol BOD-5: 770 mg/g
 BOD-20: 1,260 mg/g
 water No data available.

Chemical Oxygen Demand:

Product No data available.

Specified substance(s)

methyl acetate No data available.
 methanol 1,410 mg/g
 water No data available.

BOD/COD Ratio

Product No data available.

Specified substance(s)

methyl acetate No data available.
 methanol 54.6 %
 water No data available.

Bioaccumulative Potential

Product: No data available.

Specified substance(s)

methyl acetate No data available.
 methanol No data available.
 water No data available.

Mobility in Soil: No data available.

Known or predicted distribution to environmental compartments

methyl acetate No data available.
 methanol No data available.
 water No data available.

Results of PBT and vPvB assessment: No data available.

methyl acetate No data available.
 methanol No data available.
 water 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. Mix with compatible chemical which is less flammable and incinerate. Since emptied containers retain product residue, follow label warnings even after container is emptied. Residual vapors may explode on ignition; do not cut, drill, grind, or weld on or near this container.

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

Possible Shipping Description(s):

UN 1231 Methyl acetate 3 II

IMDG - International Maritime Dangerous Goods Code

Possible Shipping Description(s):

UN 1231 METHYL ACETATE 3 II

IATA

Possible Shipping Description(s):

UN 1231 Methyl acetate 3 II

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/2, D/2/A, D/2/B

SARA 311-312 Hazard Classification(s):

immediate (acute) health hazard
fire hazard

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

METHANOL

OSHA: hazardous

TSCA (US Toxic Substances Control Act): This product is 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): This product is 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): This product is listed on AICS or otherwise complies with NICNAS.

MITI (Japanese Handbook of Existing and New Chemical Substances): This product is listed in the Handbook or has been approved in Japan by new substance notification.

ECL (Korean Toxic Substances Control Act): This product is listed on the Korean inventory or otherwise complies with the Korean Toxic Substances Control Act.KE-23405

Philippines Inventory (PICCS) : This product is listed on the Philippine Inventory or otherwise complies with PICCS.

Inventory of Existing Chemical Substances in China: All components are listed on the Inventory of Existing Chemicals Substances in China (IECSC) or are covered under a polymer exemption. Imports may be restricted. Please contact Eastman Chemical Company, Product Safety and Health, for import details.

SECTION 16: Other information

HMIS® Hazard Ratings: Health - 2*, Flammability - 3, Chemical Reactivity - 0

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: 02/11/2015

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.