SECTION 1. IDENTIFICATION

**Product name**: Eastman(TM) PM Acetate

**Product code**: 05372-00, P0537200, P0537201, P0537205, P0537206, P0537208, E0537201

**Manufacturer or supplier's details**

**Company name of supplier**: Eastman Chemical Company

**Address**: 200 South Wilcox Drive
Kingsport TN 37660-5280

**Telephone**: (423) 229-2000

**Emergency telephone**: CHEMTREC: +1-800-424-9300, +1-703-527-3887 CCN7321

**Recommended use of the chemical and restrictions on use**

**Recommended use**: Solvent

**Restrictions on use**: None known.

SECTION 2. HAZARDS IDENTIFICATION

**GHS classification in accordance with 29 CFR 1910.1200**

**Flammable liquids**: Category 3

**GHS label elements**

**Hazard pictograms**: ![Flammable Liquid Symbol]

**Signal Word**: Warning

**Hazard Statements**: H226 Flammable liquid and vapor.

**Precautionary Statements**: **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/ eye protection/ face protection.
Response:
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

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

Disposal:
P501 Dispose of contents/container to an approved waste disposal plant.

Other hazards
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-methoxy-1-methylethyl acetate</td>
<td>108-65-6</td>
<td>&gt; 99</td>
</tr>
<tr>
<td>2-methoxy-1-propyl acetate</td>
<td>70657-70-4</td>
<td>&lt; 0.5</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

If inhaled
: Move to fresh air.
: Treat symptomatically.
: If symptoms persist, call a physician.

In case of skin contact
: Wash off with soap and water.
: If symptoms persist, call a physician.

In case of eye contact
: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

If swallowed
: Get medical advice/attention.

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

Notes to physician
: Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
: Carbon dioxide (CO2)
: Dry chemical
: Water spray

Unsuitable extinguishing
: Do not use a solid water stream as it may scatter and spread
media

fire.
Do NOT use water jet.

Specific hazards during fire fighting

: None known.

Hazardous combustion products

: No hazardous combustion products are known

Further information

: Flammable liquid and vapor.

Special protective equipment for fire-fighters

: Wear an approved positive pressure self-contained breathing apparatus in addition to standard fire fighting gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

: Use personal protective equipment.
Local authorities should be advised if significant spillages cannot be contained.

Environmental precautions

: Avoid release to the environment.

Methods and materials for containment and cleaning up

: Sweep up or vacuum up spillage and collect in suitable container for disposal.
Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion

: None known.

Advice on safe handling

: Use only in area provided with appropriate exhaust ventilation. Wash thoroughly after handling.

Conditions for safe storage

: Keep tightly closed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-methoxy-1-methylethyl acetate</td>
<td>108-65-6</td>
<td>TWA</td>
<td>50 ppm</td>
<td>US WEEL</td>
</tr>
</tbody>
</table>

Engineering measures

: Ensure adequate ventilation.
SAFETY DATA SHEET

Eastman(TM) PM Acetate

Version 2.3
Revision Date: 08/08/2019
SDS Number: 150000000240
Date of last issue: 12/08/2017
SDSUS / Z8 / 0001
Date of first issue: 09/06/2016

Personal protective equipment

Respiratory protection: Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Hand protection

Remarks: Wear suitable gloves.

Eye protection: Safety glasses

Protective measures: Remove respiratory and skin/eye protection only after vapors have been cleared from the area. Ensure that eye flushing systems and safety showers are located close to the working place. Use personal protective equipment as required.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: liquid
Color: colorless
Odor: sweet
Odor Threshold: not determined
pH: not determined
Boiling point/boiling range: 302 °F / 150 °C
Flash point: 115 °F / 46 °C
Evaporation rate: not determined
Vapor pressure: not determined
Relative vapor density: 4.6
Relative density: 0.969
Solubility(ies)
Water solubility: soluble
Partition coefficient: n-octanol/water
Pow: 3.6
log Pow: 0.56
Autoignition temperature: 669 °F / 354 °C
Decomposition temperature: Method: ASTM E659
   No exotherm to boiling (at 150 psig)
Viscosity:
   Viscosity, dynamic: 1.07 mPa.s (77 °F / 25 °C)
   Viscosity, kinematic: not determined
Explosive properties: Not classified
Oxidizing properties: No data available

SECTION 10. STABILITY AND REACTIVITY
Reactivity: None reasonably foreseeable.
Chemical stability: Stable under normal conditions.
Possibility of hazardous reactions:
   Forms peroxides if material becomes uninhibited.
Conditions to avoid: Heat, flames and sparks.
Incompatible materials: Strong oxidizing agents
Hazardous decomposition products:
   Carbon dioxide (CO2)
   Carbon monoxide

SECTION 11. TOXICOLOGICAL INFORMATION
Acute toxicity
Not classified based on available information.
Components:
2-methoxy-1-methylethyl acetate:
   Acute oral toxicity: LD50 Oral (Rat): 6,190 mg/kg
   Acute inhalation toxicity: LC50 (Rat): > 4345 ppm
      Exposure time: 6 h
   Acute dermal toxicity: LD50 Dermal (Rabbit): > 5,000 mg/kg
2-methoxypropanol:
   Acute oral toxicity: LD50 Oral (Rat): 5,710 mg/kg
   Acute dermal toxicity: LD50 Dermal (Rabbit): 5,660 mg/kg
Skin corrosion/irritation
Not classified based on available information.

**Components:**

2-methoxy-1-methylethyl acetate:
Species : Rabbit
Exposure time : 4 h
Result : none

Species : Rabbit
Exposure time : 24 h
Result : none

2-methoxypropanol:
Species : Rabbit
Result : slight

Serious eye damage/eye irritation
Not classified based on available information.

**Components:**

2-methoxy-1-methylethyl acetate:
Species : Rabbit
Result : very slight

Respiratory or skin sensitization

Skin sensitization
Not classified based on available information.

Respiratory sensitization
Not classified based on available information.

**Components:**

2-methoxy-1-methylethyl acetate:
Test Type : Skin sensitization
Species : Guinea pig
Result : non-sensitizing

Germ cell mutagenicity
Not classified based on available information.

Carcinogenicity
Not classified based on available information.

**IARC**
No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA**
No component of this product present at levels greater than or equal to 0.1% is on OSHA’s list of regulated carcinogens.
NTP  No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity
Not classified based on available information.

Product:
Reproductive toxicity - Assessment: No toxicity to reproduction

STOT-single exposure
Not classified based on available information.

STOT-repeated exposure
Not classified based on available information.

Aspiration toxicity
Not classified based on available information.

Further information

Product:
Remarks: None known.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

2-methoxy-1-methylethyl acetate:
Toxicity to fish: LC50 (Pimephales promelas (fathead minnow)): 161 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates: LC50 (Daphnia): 408 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants: EC50 (Selenastrum capricornutum (green algae)): > 1,000 mg/l
Exposure time: 96 h
Test Type: Growth inhibition

NOEC (Selenastrum capricornutum (green algae)): >= 1,000 mg/l
Exposure time: 96 h
Test Type: Growth inhibition

Toxicity to fish (Chronic toxicity): LC50 (Oryzias latipes): 63.5 mg/l
Exposure time: 14 d

NOEC (Oryzias latipes): 47.5 mg/l
Exposure time: 14 d
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):

- NOEC (daphnid): >= 100 mg/l
- Exposure time: 21 d
- EC50 (daphnid): > 100 mg/l
- Exposure time: 21 d

**Persistence and degradability**

**Components:**

- 2-methoxy-1-methylethyl acetate:
  - Biodegradability: Concentration: 76.4 mg/l
  - Result: Readily biodegradable.
  - Biodegradation: 90%
  - Exposure time: 28 d
  - Method: Ready Biodegradability: CO2 Evolution Test

- Biochemical Oxygen Demand (BOD):
  - Concentration: 363 mg/l
  - Incubation time: 5 d
  - 1,050 mg/l
  - Incubation time: 20 d

- THOD: 76.4 mg/l

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

**Other adverse effects**

No data available

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods**

Waste from residues: Dispose of in accordance with local regulations.

**SECTION 14. TRANSPORT INFORMATION**

**International Regulations**

**IATA-DGR**

- UN/ID No.: UN 3272
- Proper shipping name: Esters, n.o.s.
  (propylene glycol monomethyl ether acetate)
- Class: 3
- Packing group: III
- Labels: Flammable Liquids
Packing instruction (cargo aircraft): 366
Packing instruction (passenger aircraft): 355

IMDG-Code
UN number: UN 3272
Proper shipping name: ESTERS, N.O.S. (propylene glycol monomethyl ether acetate)
Class: 3
Packing group: III
Labels: 3
EmS Code: F-E, S-D
Marine pollutant: no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

Domestic regulation
49 CFR
UN/ID/NA number: UN 3272
Proper shipping name: Esters, n.o.s.
Class: CBL
Packing group: III
Labels: None
ERG Code: 128
Marine pollutant: no
Remarks: combustible liquid, Packing group III for quantities of 450 liters (119 gallons) or more; not regulated for smaller quantities

Special precautions for user
The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity
This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity
This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards: Flammable (gases, aerosols, liquids, or solids)

The ingredients of this product are reported in the following inventories:
DSL: All components of this product are on the Canadian DSL
AICS: On the inventory, or in compliance with the inventory
SECTION 16. OTHER INFORMATION

Further information

**NFPA 704:**

- Flammability:
  - 1: Special hazard.
  - 2: Health
  - 0: Instability

**HMIS® IV:**

- HEALTH: / 1
- FLAMMABILITY: 2
- PHYSICAL HAZARD: 0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

- US WEEL: USA. Workplace Environmental Exposure Levels (WEEL)
- US WEEL / TWA: 8-hr TWA

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with
x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SAR - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 08/08/2019

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

US / Z8