Safety Data Sheet

# PGMEA

## SECTION 1: Identification

### 1.1 GHS Product identifier

| | |
|---|---|
| Product name | PGMEA |

### 1.2 Other means of identification

PM Acetate, Propylene Glycol Monomethyl Ether Acetate, 2-Methoxy-1-Methylethylacetate, 1-Methoxy-2-Propanol Acetate

### 1.3 Recommended use of the chemical and restrictions on use

For laboratory and manufacturing use only.

### 1.4 Supplier's details

| | |
|---|---|
| Name | High Purity Products |
| Address | 14546 N. Lombard Street<br>Portland OR 97203<br>United States of America |
| Telephone | 503-227-1616 |
| email | help.desk@highpp.com |

### 1.5 Emergency phone number

CHEMTREC: 1-800-424-9300

## SECTION 2: Hazard identification

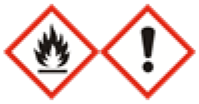
### 2.1 Classification of the substance or mixture

**GHS classification in accordance with: OSHA (29 CFR 1910.1200)**

- Flammable liquids, Cat. 3
- Specific target organ toxicity (single exposure), Cat. 3

### 2.2 GHS label elements, including precautionary statements

**Pictogram**



| | |
|---|---|
| **Signal word** | **Danger** |

**Hazard statement(s)**

| | |
|---|---|
| H226 | Flammable liquid and vapor |
| H336 | May cause drowsiness or dizziness. |

**Precautionary statement(s)**

| | |
|---|---|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P240 | Ground and bond container and receiving equipment. |
| P261 | Avoid breathing dust/fume/gas/mist/vapors/spray. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. |
| P308+P313 | IF exposed or concerned: Get medical attention. |
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P210 | Keep away from heat/sparks/open flames/hot surfaces. No smoking. |
| P242 | Use only non-sparking tools. |
| P243 | Take precautionary measures against static discharge. |

## SECTION 3: Composition/information on ingredients

### 3.1 Mixture

| Constituents | CAS Number | Concentration (Weight) |
|---|---|---|
| Propylene Glycol Monomethyl Ether Acetate | 108-65-6 | 100% |

## SECTION 4: First-aid measures

### 4.1 Description of necessary first-aid measures

| | |
|---|---|
| If inhaled | If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain emergency medical attention. Prompt action is essential. |
| In case of skin contact | Remove contaminated clothing as needed. Wash thoroughly with soap and water. Flush with lukewarm water for 15 minutes. If sticky, use waterless cleaner first. Seek medical attention if discomfort persists. |
| In case of eye contact | Immediately flush eyes with plenty of water. Get medical attention, if irritation persists. |
| If swallowed | If large quantity swallowed, give lukewarm water (pint 1/2 liter). If victim completely conscious/alert. Do not induce vomiting. Risk of damage to lungs exceeds poisoning risk. Obtain emergency medical attention. |

## SECTION 5: Fire-fighting measures

**5.1 Suitable 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. Do NOT use straight streams of water.

**5.2 Specific hazards arising from the chemical**
Carbon monoxide and unidentified organic compounds may be formed during combustion. When heated above the flash point, releases flammable vapors. When mixed with air and exposed to ignition source, vapors can burn in open or explode if confined. Vapors may be heavier than air. May travel long distances along the ground before igniting and flashing back to vapor source. Fine sprays/mists may be combustible at temperatures below normal flash point.

**5.3 Special protective actions for fire-fighters**
Do not enter fire area without proper protection. Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters protective clothing will only provide limited protection.

## SECTION 6: Accidental release measures

**6.1 General procedures:** Release can cause fire or explosion. Liquids/vapors may ignite. Evacuate/limit access. Equip responders with proper protection. Extinguish all ignition sources. Stop release. Prevent flow to sewer/public waters. Notify fire and environmental authorities. Slippery walking/spread granular cover or soak up. Soak up small spills with inert solids. Use suitable disposal containers. On water, material is soluble and may float or sink. Contain/collect rapidly to minimize dispersion. Disperse residue to reduce aquatic harm. Report per regulatory requirements.

## SECTION 7: Handling and storage

**7.1 General procedures**:
It is recommended that any liquid product exposed to air not be highly concentrated by evaporation without first assuring that no peroxide is present. Alternately, positive steps should be taken to reduce any accumulated peroxides to a safe level before concentrating the liquid. Use only non-sparking tools. Properly ground containers before beginning transfer. All equipment must conform to applicable electrical code. Handle empty containers with care. Flammable/combustible residue remains after emptying. Isolate, vent, drain, wash and purge systems or equipment before maintenance or repair. Extinguish all ignition sources. Check atmosphere for explosiveness and oxygen deficiencies. Wear recommended personal protective equipment. Observe precautions pertaining to confined space entry.

**7.2 Precautions for safe handling:**
Avoid contact with skin and eyes. Do not inhale vapors. Keep away from heat and open flame. Wash thoroughly with soap and water after handling. Store tightly closed containers in cool, dry place. Use inert gas blanket.

**7.3 Conditions for safe storage:**
Store only in tightly closed, properly vented containers away from heat, sparks, open flame and strong oxidizing agents. Storage under nitrogen atmosphere is recommended to minimize possible formation of highly reactive peroxides. Store in properly lined steel/stainless steel to avoid slight discoloration from mild steel/copper. Aluminum (5000 series alloys - U.S. Aluminum Association Standard) showed no corrosion after 30 days contact with PM Acetate at 71 degrees C (160 deg. F). Some plastics/rubbers are attacked by Glycol Ethers/Ether Esters. This product will absorb water if exposed to air.

## SECTION 8: Exposure controls/personal protection

**8.1 Control parameters**

| Chemical name | Cas Number | NIOSH REL TWA |
|---|---|---|
| Propylene Glycol Monomethyl Ether Acetate | 108-65-6 | 100 ppm (ST) 150 ppm |

**8.2 Individual protection measures, such as personal protective equipment (PPE)**

**Pictograms**

***Personal Protective Equipment***

**Eyes and Face:** Chemical splash goggles and face shield in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. (Consult your industrial hygienist.)

**Respiratory:** If overexposure has been determined or documented, a NIOSH/MSHA jointly approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators under specified conditions. (See your safety equipment supplier.) Engineering or administrative controls should be implemented to reduce exposure.

**Work Hygienic Practices:** Use good personal hygiene when handling this product. Wash hands after use, before eating, drinking, smoking, or using the toilet.

## SECTION 9: Physical and chemical properties and safety characteristics

| | |
|---|---|
| Physical state | Liquid |
| Appearance | Clear |
| Color | White |
| Odor | Slight sweet odor |
| Odor threshold | No data available. |
| pH | 6.8 |
| Melting point/freezing point | -65 °C |
| Boiling point or initial boiling point and boiling range | 146 °C |
| Flash point | 45.5° C |
| Evaporation rate | 0.3 |
| Lower explosion limit / flammability limit | 1.5% |
| Upper explosion limit / flammability limit | 12% |
| Vapor Pressure | 12 mmHg at 25 °C |
| Relative vapor density | Heavier than Air |
| Density and/or relative density | 0.96 |
| Solubility | 198 g/L at 20 °C |
| Auto-ignition temperature | 318°C |
| Decomposition temperature | No data available. |
| Kinematic viscosity | No data available. |
| Explosive properties | No data available. |

**Particle characteristics**
No data available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity
Stable under recommended storage conditions.

### 10.2 Chemical stability
Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions
No data available.

### 10.4 Conditions to avoid

Avoid extended contact with air or oxygen. In contact with moisture, this hygroscopic (i.e. absorbs water from the air) material may degrade or become contaminated. Heat, sparks, open flame, other ignition sources, and oxidizing conditions.

### 10.5 Incompatible materials

Strong oxidizing agents. Moisture and humidity. May react with oxygen to form peroxides. However, there is no known evidence that it has nearly the peroxide forming potential as, for example diethyl ether, etc.

### 10.6 Hazardous decomposition products

Thermal decomposition may yield carbon monoxide and carbon dioxide.

## SECTION 11: Toxicological information

### Information on toxicological effects

**Acute Toxicity**
Propylene Glycol Monomethyl Ether Acetate:
LD50 – oral – rat – 8532 mg/kg
LD50 – dermal – rabbit – >5 mg/kg

**Skin corrosion/irritation**
May cause skin irritation.

**Serious eye damage/irritation**
Causes eye irritation.

**Germ cell mutagenicity**
No data available.

**Carcinogenicity**
No data available.

**Reproductive toxicity**
No data available.

**STOT-single exposure**
Yes, irritates, and causes dizziness

**STOT-repeated exposure**
No data available.

**Aspiration hazard**
No data available.

## SECTION 12: Ecological information

**Toxicity**
LC50 - Oncorhynchus mykiss (rainbow trout) - 100 – 180 mg/l - 96 h

**Persistence and degradability**
No data available.

**Bioaccumulative potential**
A study suggests the potential for bioconcentration in aquatic organisms is low.

**Mobility in soil**
1-methoxy-2-propyl acetate is expected to have very high mobility in soil.

## SECTION 13: Disposal considerations

**Product disposal**
Product disposal Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies, if necessary, before disposing of waste product container or residue.
EPA Waste Code: **D001**

## SECTION 14: Transport information

**DOT (US)**
UN Number: UN1993
Class: 3
Packing Group: III
Proper Shipping Name: Flammable Liquids, N.O.S., (1-methoxy-2-propanol Acetate)

**IMDG**
UN Number: UN1993
Class: 3
Packing Group: III
Proper Shipping Name: Flammable Liquids, N.O.S., (1-methoxy-2-propanol Acetate)

**IATA**
UN Number: UN1993
Class: 3
Packing Group: III
Proper Shipping Name: Flammable Liquids, N.O.S., (1-methoxy-2-propanol Acetate)

## SECTION 15: Regulatory information

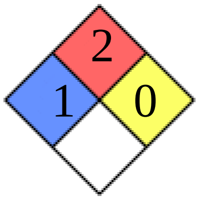
### 15.1 Safety, health and environmental regulations specific for the product in question

**Canadian Domestic Substances List (DSL)**
1-methoxy-2-propanol Acetate

**HMIS Rating**

| PGMEA | |
|---|---|
| HEALTH | 1 |
| FLAMMABILITY | 2 |
| PHYSICAL HAZARD | 0 |
| PERSONAL PROTECTION | H |

**NFPA Rating**



## SECTION 16: Other information

**Disclaimer:**

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