

SAFETY DATA SHEET



Date Prepared : 07/17/2006

MSDS No : 4463

Date-Revised : 04/14/2016

Revision No : 6

PGMEA

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: PGMEA**ALTERNATE TRADE NAME(S):** PM Acetate, Propylene Glycol Monomethyl Ether Acetate, 2-Methoxy-1-Methylethylacetate, 1-Methoxy-2-Propanol Acetate, PGMEA SEMI**MANUFACTURER**

Distributed by Tarr Acquisition, LLC

4115 W. Turney Ave.

Phoenix, AZ 85019

Product Stewardship: 602-233-2000**24 HR. EMERGENCY TELEPHONE NUMBERS****CHEMTREC (US Transportation) :**(800) 424 - 9300**CANUTEC (Canadian Transportation) :**(613) 996 - 6666

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS**Health:**

Respiratory Tract Irritation

Eye Irritation

Skin Irritation

GHS LABELExclamation
mark**SIGNAL WORD: WARNING****HAZARD STATEMENTS**

H303: May be harmful if swallowed.

H336: May cause drowsiness or dizziness.

PRECAUTIONARY STATEMENT(S)**Response:**

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P270: Do not eat, drink or smoke when using this product.

P314: Get medical advice/attention if you feel unwell.

POTENTIAL HEALTH EFFECTS**EYES:** May cause moderate irritation, including burning sensation, tearing, redness or swelling.

PGMEA

SKIN: May cause mild skin irritation. Symptoms may include redness and burning of skin. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

INGESTION: May cause gastrointestinal discomfort with any or all of the following symptoms: nausea, vomiting, lethargy or diarrhea.

INHALATION: Prolonged overexposure to either vapor or mist may cause coughing, shortness of breath, dizziness and drunkenness.

MEDICAL CONDITIONS AGGRAVATED: Pre-existing disorders or diseases of the eye. This material may affect mucous tissue and/or aggravate mucous membrane dysfunction.

ROUTES OF ENTRY: Inhalation, skin absorption, skin contact, eye contact.

TARGET ORGAN STATEMENT: Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects; mild, reversible kidney effects; nasal damage.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS
Propylene Glycol Monomethyl Ether Acetate	100	108-65-6

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention, if irritation occurs or persists.

SKIN: 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.

INGESTION: If large quantity swallowed, give lukewarm water (pint 1/2 litre). If victim completely conscious/alert. Do not induce vomiting. Risk of damage to lungs exceeds poisoning risk. Obtain emergency medical attention.

INHALATION: 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.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

ACUTE EFFECTS: Stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), pain in the abdomen, blood abnormalities (breakage of red blood cells), kidney damage and death.

CHRONIC EFFECTS: Repeated or prolonged exposure may irritate the mucous membranes.

NOTES TO PHYSICIAN: Treat symptomatically. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. If pain, blinking, tears, or redness continue, patient should contact ophthalmologist.

5. FIRE FIGHTING MEASURES

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.

PGMEA

HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide and unidentified organic compounds may be formed during combustion.

EXPLOSION HAZARDS: 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.

FIRE FIGHTING PROCEDURES: Fight fire from a safe distance/protected location. Heat may build enough pressure to rupture closed containers/spreading fire/increasing risk of burns/injuries. Use water spray/fog for cooling. Avoid frothing/stream explosion. Burning liquid may float on water. Although water soluble, may not be practical to extinguish fire by water dilution. Notify authorities immediately. If liquid enters sewer/public waters.

FIRE FIGHTING EQUIPMENT: 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.

6. ACCIDENTAL RELEASE MEASURES

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.

7. HANDLING AND STORAGE

HANDLING: 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.

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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

PGMEA

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)				
	EXPOSURE LIMITS			
Chemical Name	Type		ppm	mg/m³
Propylene Glycol Monomethyl Ether Acetate	ACGIH TLV	TWA	[1]	[1]
	Supplier OEL	TWA	30	
		STEL	90	
OSHA TABLE COMMENTS:				
1. NL = Not Listed				

ENGINEERING CONTROLS: Local exhaust and general ventilation must be adequate to meet exposure limit(s).

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.)

SKIN: Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Slight sweet, ether-like odor.

APPEARANCE: Clear

COLOR: Water-white.

PERCENT VOLATILE: 100

FLASHPOINT AND METHOD: ~ 47°C (116°F) TAG CC

FLAMMABLE LIMITS: 1.5 vol % to 10 vol %

AUTOIGNITION TEMPERATURE: 272°C (522°F)

VAPOR PRESSURE: ~ 3.8 mm Hg at 25°C (77°F)

VAPOR DENSITY: ~ 4.6 (Air=1)

BOILING POINT: ~ 146°C (295°F) 760 mm Hg

FREEZING POINT: NDA = no data available.

MELTING POINT: No data available.

SOLUBILITY IN WATER: Appreciable (10 percent or more)

EVAPORATION RATE: ~ 0.37 (n-Butyl Acetate=1)

PGMEA**DENSITY:** 8.15 at (68°F)**SPECIFIC GRAVITY:** ~ 0.969 to 0.979 at (68°F)**VISCOSITY #1:** ~ at 25°C**MOLECULAR WEIGHT:** 132.2 g/mol **Formula:** C₆H₁₂O₃**(VOC):** 8.150 LBS./gal.**10. STABILITY AND REACTIVITY****HAZARDOUS POLYMERIZATION:** None Expected.**STABILITY:** This material is stable when properly handled and stored.**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.**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition may yield carbon monoxide and carbon dioxide.**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.**11. TOXICOLOGICAL INFORMATION****ACUTE TOXICITY**

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)
Propylene Glycol Monomethyl Ether Acetate	8532 mg/kg (Rat)	> 5 mg/kg (Rabbit)

DERMAL LD₅₀: > 5 mg/kg (rabbit)**ORAL LD₅₀:** 8532 mg/kg (rat)**INHALATION LC₅₀:** Repeated Dose Toxicity - On repeated, prolonged exposure may be a nasal irritant.**REPRODUCTIVE TOXICITY:** 2-Methoxy-1-propanol acetate: Repeated Dose Toxicity 2-Methoxy-1-Propanol has been shown to cause developmental effects in offspring of female rabbits exposed to 0, 145, 225, 350, and 545 ppm by inhalation during pregnancy. 145 ppm was the no observed effect level (NOEL) in this study.**12. ECOLOGICAL INFORMATION****ENVIRONMENTAL DATA:** It may enter soil and may contaminate water.**ECOTOXICOLOGICAL INFORMATION:** Avoid uncontrolled releases of this material. Where spills are possible, a comprehensive spill response plan should be developed and implemented.**GENERAL COMMENTS:** Biodegradation: Data for a closely related material suggest it will be inherently biodegradable.**13. DISPOSAL CONSIDERATIONS**

PGMEA

DISPOSAL METHOD: The preferred options for disposal are to send to licensed reclaimers, or to permitted incinerators. Any disposal practice must be in compliance with federal, state, and local regulations. Do not dump into sewers, ground, or any body of water.

EMPTY CONTAINER: KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue and can be dangerous. Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse. Do not pressurize, cut weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks static electricity, or other sources of ignition.

RCRA/EPA WASTE INFORMATION: 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. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not DOT regulated in packaging less than 119 gallons capacity.

TECHNICAL NAME: (1-methoxy-2-propanol acetate)

NAERG: 127

REPORTABLE QUANTITY (RQ) UNDER CERCLA: Not Applicable

OTHER SHIPPING INFORMATION: Reference: See Transportation 49 CFR 173.150(f)(1)(2) explaining the "Combustible Liquid Exception for non-bulk packaging". This provision does not apply to transportation by vessel or aircraft.

AIR (ICAO/IATA)

SHIPPING NAME: Esters, N.O.S. (Propylene Glycol Monomethyl Ether Acetate)

TECHNICAL NAME: (1-methoxy-2-propanol acetate)

UN/NA NUMBER: 3272

PRIMARY HAZARD CLASS/DIVISION: 3

PACKING GROUP: III

ERG: 127

VESSEL (IMO/IMDG)

SHIPPING NAME: Esters, N.O.S. (Propylene Glycol Monomethyl Ether Acetate)

TECHNICAL NAME: (1-methoxy-2-propanol acetate)

UN/NA NUMBER: 3272

PRIMARY HAZARD CLASS/DIVISION: 3

PACKING GROUP: III

15. REGULATORY INFORMATION

UNITED STATES

DOT LABEL SYMBOL AND HAZARD CLASSIFICATION

R68/21/22: Harmful: possible risk of irreversible effects in contact with skin and if swallowed.

PGMEA**SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)**

311/312 HAZARD CATEGORIES: This product should be reported as a delayed (chronic) health hazard, and a fire hazard.

FIRE: Yes **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** No **CHRONIC:** Yes

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All components of this product are on the TSCA inventory or are exempt from TSCA Inventory requirements under CFR 40 CFR 720.30.

16. OTHER INFORMATION

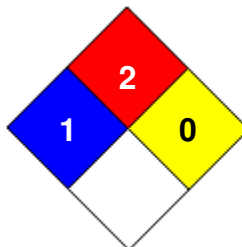
REASON FOR ISSUE: Updated SDS information and changed to new format.

PREPARED BY: Compliance **Date-Revised:** 04/14/2016

REVISION SUMMARY: This MSDS replaces the 02/01/2016 MSDS.

HMIS RATING

HEALTH	1
FLAMMABILITY	2
PHYSICAL HAZARD	0
PERSONAL PROTECTION	H

NFPA CODES

NFPA STORAGE CLASSIFICATION: These ratings are part of a specific hazard communication program and should be disregarded where individuals are not trained in the use of this hazard rating system. You should be familiar with the hazard communication programs applicable to your workplace.

MANUFACTURER DISCLAIMER: The information contained herein is based on the data available to us and is believed to be accurate. However, Tarr Acquisition, LLC (Tarr, LLC) makes no warranty, expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Tarr, LLC assumes no responsibility for injuries from the use of the product described herein.