

SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT

Product Name: Propylene glycol monomethyl ether acetate
Product Description: -
Chemical Formula: C₆H₁₂O₃
Recommended Use: Industrial solvent for cleaner and coating formulations

COMPANY IDENTIFICATION

Supplier: UNION PETROCHEMICAL PUBLIC COMPANY LIMITED
728 Union House Building, Baromratchonnani Rd.,
Bangbumru, Bangplad, Bangkok 10700
Supplier General Contact: +662 881 8288

This (M)SDS is a generic document with no country specific information included.

SECTION 2 HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

Flammable liquid: Category 3.
Serious eye damage/eye irritation: Category 2A.

GHS LABEL ELEMENTS:

Pictogram:



Signal Word: Flammable liquid . Warning

Hazard Statements:

1. Flammable liquid and vapor.
2. Cause eye irritation

Precautionary Statements:

1. Store in a well-ventilated place
2. Keep container tightly closed and cool.
3. Avoid eye contact
4. Away from any source of ignition

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name (Synonymous Name)	CAS No.	Percentage of Hazardous Ingredient
Propylene glycol monomethyl ether acetate (1-Methoxy-2-propanol acetate, Propylene glycol methyl ether acetate, Acetic acid, 2-methoxy-1-methylethyl ester, PGMEA, 2-Methoxy-1-methylethyl acetate, 1-Methoxy-2-acetoxypropane, 2-Acetoxy-1-methoxypropane, Propylene glycol 1-methyl ether, 2-acetate, PMA)	108-65-6	100%

SECTION 4

FIRST AID MEASURES

INHALATION

Remove the person from the source of exposure and seek for medical advice

SKIN CONTACT

Flush the affected area with clean water and seek for medical advice

EYE CONTACT

Flush the affected area with clean water and seek for medical advice.

INGESTION

Do not eat anything else, if may, drink some water and seek for medical help immediately

THE WORST SYMPTOMS

One may experience headache, stomach upset or fainted

NOTE TO FIRST-AID PERSONNEL

Wear Class C protection equipment

NOTE TO DOCTOR

No specific antidote. Treatment of exposure should be focused on the control of symptoms of the patient

SECTION 5

FIRE FIGHTING MEASURES

FIRE EXTINGUISHER

Carbon Dioxide, Alcohol Resistant Foam, Chemical Arid Powder or Mist

SPECIAL OCCASIONS MAY OCCUR DURING FIRE

1. The smoke may contain the original material in addition to varying compositions of toxic or irritating combustion products.
2. The vapors are heavier than air and may travel a long distance and accumulated in low areas. Flashback may occur.

FIREFIGHTING GUIDELINES

1. Keep people away then isolate fire and deny unnecessary entry
2. Remove the container away from the firing place, if possible
3. Fire at storage areas : Apply auto frame controlling kit or auto-spraying nozzle until the fire has been extinguished
4. Do not use direct water stream which may spread fire
5. Evacuate immediately if tank safety valve sounded or color changed
6. Cool down the tanks or the containers with mist until the fire has been extinguished

SPECIAL EQUIPMENT FOR FIREFIGHTERS

Respirators, protective gloves and fire clothing

SECTION 6

ACCIDENTAL RELEASE MEASURES

INDIVIDUAL PRECAUTION

1. Isolate any irrelevant person from the leak until the leakage is cleaned
2. Eliminate all sources of ignition in vicinity of leak to avoid fire or explosion
3. Only trained people are allowed to clean up the leakage

ENVIRONMENTAL PRECAUTION

1. Stop further leaking if possible
2. Prevent the leakage from entering into soil and sewerage



CLEANING METHODS

1. Reduce vapor by mist and collect the leakage by dirt or sand
2. Gather the pelleted sands into properly labeled containers
3. Contact emergency center for massive leakage

SECTION 7

HANDLING AND STORAGE

HANDLING

1. Away from any source of ignition
2. Avoid direct contact with eyes, skins and clothing and inhalation
3. Operation needs to be done in a well-ventilated place
4. Smoking is extremely prohibited
5. Containers, even those that have been emptied, can contain vapors; therefore, do not cut, drill, grind, weld or perform similar operations on or near empty containers

STORAGE

1. Store away from direct sunlight and minimize sources of ignition such as static build up, heat, spark or flame
2. All sorts of containers have to be tightly closed and labeled all the time
3. Storages have to be away from any incompatible materials
4. Examine the containers for leakage periodically

SECTION 8

EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS

1. Use local exhaust ventilation or other engineering controls to maintain airborne levels below requirements
2. If there are no applicable exposure limit requirements, general ventilation should be sufficient for daily uses

Control Parameters			
TWA	STEL	CEILING	BEIs
50 ppm	100 ppm	-	-

INDIVIDUAL PROTECTION MEASURES

Respiratory protection	Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements. If there are no applicable exposure limit requirements, wear respiratory protection when one experienced adverse effects such as irritation or discomfort
Hand protection	Wear chemical protective gloves
Eye protection	Use safety glasses with side shields
Skin and Body protection	Wear clean, body covering clothing

HYGIENE MEASURES

1. After duty one should take off contaminated clothes, if any, clean thoroughly before next use or disposal.
Laundry worker must be advised about the hazard
2. No food or smoking at workplace
3. Keep the workplace clean and neat

SECTION 9

PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Liquid

Odor threshold : -

pH : -

Flammability (solid, gas) : Not applicable to Liquids

Odor : Ether

Melting point : Not applicable to liquids

Boiling point : 146 °C

Flash Point : 42 °C

Test method : closed cup

Decomposition temp. : -
Auto-ignition temp. : 354 °C
Vapor pressure : 3.8 mmHg @25°C
Density : 0.966 (Water=1)
Log Kow : -

Explosion limit : 1.5% ~ 7.0% (200 °C)
Vapor density : (air=1) 4.6
Solubility : Solubility with waterish 18.5%,
could be dissolved in organic solvent
Evaporation Rate : 0.39 (Butyl acetate = 1)

SECTION 10	STABILITY AND REACTIVITY
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REACTIVITY: Stable under recommended storage conditions

POSSIBILITY OF HAZARDOUS REACTIONS: Prevent contact with air for a long period of time or it may form peroxides.

CONDITIONS TO AVOID: Exposure to elevated temperatures can cause product to decompose.
Generation of gas during decomposition can cause pressure in closed systems.
Avoid static discharge.

INCOMPATIBLE MATERIALS: Strong Acids, strong bases and strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS: Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to carbon dioxide.

SECTION 11	TOXICOLOGICAL INFORMATION
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INFORMATION ON TOXICOLOGICAL EFFECTS

<u>Route of Exposure</u>	<u>Conclusion/Remarks</u>
Acute toxicity	
Skin	Prolonged and repeated contact may cause slight skin irritation with local redness
Inhalation	Brief exposure (minutes) is not likely to cause adverse effects; however, the risk will incur by higher temperature. Symptoms could be coughing, headache, throat irritation and sneezing.
Oral	Low toxicity if swallowed, adverse effects are likely to occur with large amount of swallow. LD50 : 8532 mg/kg (Rat, Swallow) LC50 : 4345 ppm/6H (Rat, Inhalation)
Eye	May cause slight temporary eye irritation and slight injury to cornea.
Chronic Toxicity or Long Term Effects	Symptoms of excessive exposure may affect respiratory system, liver and kidney; lethargy may be observed.

SECTION 12	ECOLOGICAL INFORMATION
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ECOTOXICITY :

LC50 (Fish) : -
EC50 (Aquatic Invertebrates) : -
Bio concentration factor (BCF) : -

PERSISTENCE AND DEGRADABILITY :

Photodegradation Half-life (air) –
Half-life (Water surface) : -
Half-life (Groundwater) : -
Half-life (Soil) : -



BIOACCUMULATIVE POTENTIAL : Low

MOBILITY IN SOIL : Potential for mobility in soil is very high

OTHER ADVERSE EFFECTS : -

SECTION 13	DISPOSAL CONSIDERATIONS
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WASTE TREATMENT METHODS :

1. Incineration
2. Bury
3. Any disposal practice must be in compliance with local regulations and laws

SECTION 14	TRANSPORT INFORMATION
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UN number : 1993

UN shipping name : 1-Methoxy-2-propanol acetate

Transport hazard class(es) : 3

Packing group : III

Environmental hazards : Not considered environmental hazardous

Special precautions : -

SECTION 15	REGULATORY INFORMATION
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Applicable regulations :

1. Occupational safety and health act
2. Regulations for the Labeling and Hazard Communication of Hazardous Chemicals
3. Road and traffic safety rules
4. Methods and Facilities Standards for the Storage, Clearance and Disposal of Industrial Waste
5. Public Hazardous Materials and Flammable Pressurized Gases Establishment Standards and Safety Control Regulations
6. Assessment and Classification of Hazardous Chemicals Regulation

SECTION 16	OTHER INFORMATION
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- References**
1. RTECS Database, TOMES CPS CD, Vol.71, 2007
 2. ChemWatch Database, 2007-1
 3. OHS MSDS Database, 2007
 4. HSDB Database, TOMES CPS CD, Vol.71, 2007

Note "..." No information is available at this time.

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