



SAFETY DATA SHEET

PMA SOLVENT

1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Product name: PMA SOLVENT

Recommended use: Chemical for industry

Manufacturer/Supplier: **MODERN CHEMICAL CO.,LTD.**
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2. HAZARDS IDENTIFICATION

Label elements

Pictogram



Signal word

Warning

Hazard statement(s):

- 1.) Flammable liquid and vapour.
- 2.) Causes serious eye irritation.

Precautionary statement(s):

- 1.) Keep away from sources of ignition/heat/sparks /open flames/hot surfaces. - No smoking.
- 2.) Keep container tightly closed.
- 3.) Ground/bond container and receiving equipment.
- 4.) Use explosion-proof electrical/ventilating/lighting/equipment.
- 5.) Use only non-sparking tools.
- 6.) Take precautionary measures against static discharge.



- 7.) Wear protective gloves/protective clothing/eye protection/face protection.
- 8.) IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- 9.) Store in a well-ventilated place. Keep cool.
- 10.) Dispose of contents/container in accordance with local/regional/national/international regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonym: 1-Methoxy-2-propyl acetate, 1,2-Propanediol monomethyl ether acetate, Propylene glycol methyl ether acetate, PGMEA, Propylene glycol monomethyl ether acetate, Acetic acid, 2-methoxy-1-methylethyl ester, 2-Methoxy-1-methylethyl acetate, 1-Methoxy-2-acetoxypropane, 2-Acetoxy-1-methoxypropane, Propylene glycol-1-methyl ether, 2-acetate, PMA.

Ingredients	% (w/w)	CAS NO.
PMA SOLVENT	100	108-65-6

4. FIRST AID MEASURES

- Inhalation:** If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.
- Skin contact:** Wash off with soap and plenty of water. Consult a physician.
- Eye contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
- Ingestion:** **Do NOT induce vomiting.** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable Extinguishing Media:

No data available

Specific hazards arising from Chemicals:

Carbon oxides.

Special protective equipment for fire-fighters:

Wear self contained breathing apparatus for fire fighting if necessary.



6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Use personal protective equipment. Avoid breathing vapors, mist or gas.

Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and Material for Containment and Clean Up:

Pick up and arrange disposal. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling & Product Transfer:

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

Conditions for Safe Storage & Unsuitable Materials:

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits: TWA 50 ppm

Appropriate Engineering Controls:

Provide the local exhaust ventilating system. If the material exceeds the exposure lower limit, the ventilation facilities must be the explosion-proof type.

Individual Protection Measures

Respiratory protection:

Use a full-face supplied air respirator.

Hand protection:

Wear impervious chemical resistant gloves.

Eye protection:

Wear chemical goggles.

Skin and body protection:

Protective work clothing.

Hygiene measures:

Take off the clothes of pollution as quickly as possible after the work. Forbid smoking or diet in the workplace. After dealing with the material, must wash hands completely. Keep the working place clean.



9. PHYSICAL AND CHEMICAL PROPERTIES

Form, Color and Odor : liquid, colourless characteristic	Evaporation rate : 0.39 (n-Butyl Acetate =1)
Melting Point : -67 °C	Specific gravity : 0.965 – 0.975 at 20 °C
pH : N/A	Solubility in water : Soluble
Boiling point : 145.8-151 °C	Viscosity : N/A
Vapour pressure : 3.8 mmHg at 25 °C	Vapour density : 4.6 g/l (Air = 1)
Lower explosive limits: 1.5 %Vol	Upper explosive limits: 14 %Vol
Auto-ignition temperature: 333-354 °C	Flash Point: 42-48 °C
Odour threshold: N/A	Flammability (solid, gas): N/A
Decomposition temperature: N/A	Solubility in other solvents: Methanol, Alcohol, Ethylene glycol, Acetone, etc.
n-octanol/water partition coefficient (log P_{ow}): 0.43	

10. STABILITY AND REACTIVITY

Chemical stability: Stable at normal temperature and on normal pressure. May formed as the explosive peroxides. Avoid being long term stored or contacted with the air, light. Do not use and store it if the temperature higher that room temperature.

Reactions: No data available

Possibility of Hazardous Reactions: Can not polymerize suddenly at normal temperature.

Conditions to avoid: Heat, open flames, sparks, light, Oxidizers, moisture, Other ignition and heat the vessels may cause the explosion.

Materials to avoid: Strong oxidizing agents

Hazardous decomposition products: Carbon dioxide will be volatilized when burned, carbon oxide.

11. TOXICOLOGICAL INFORMATION

Acute toxicity: LD50 (Oral, rat): 7964-8532 mg/kg

LC50 (Inhale, rat): 4345 ppm/6h

Sensitization: May be harmful if inhaled. May cause respiratory tract irritation.

May be harmful if swallowed. May be harmful if absorbed through skin.



Causes eye irritation.

Chronic toxicity:

Exposed excessively and repeatedly may cause upper respiratory tract irritation and the health effect of liver and kidney. While expose the rats at the value of PGMEA 3000 ppm, the symptoms may developed: temporarily mild movement disorder, sleeping, central nervous depression, low body temperature, liver weight increase in male, slight poisoning in fetus.

Further toxicological information: No data available

12. ECOLOGICAL INFORMATION

Toxicity

Toxicity to fish: LC50 - Petromyzon marinus: 5000 ug/l - 24 Year

Toxicity to daphnia and other aquatic invertebrates:

EC50 - Daphnia magna (Water flea): > 500 mg/l - 48 h

Toxicity to algae: No data available

Toxicity to bacteria: No data available

Biodegradability Remarks: Degradable.

Bioaccumulative potential: No data available.

Mobility: No data available

Affected in any other way: No data available

13. DISPOSAL CONSIDERATIONS

Material Disposal: Consult the relevant regulation to deal with. Retrieve as much as possible or consult manufacturers. Incinerate the leftovers in the qualified place.

Container Disposal: Retrieve container if possible, or discard in the qualified field.

14. TRANSPORT INFORMATION

ADR/RID

UN-No: 3272

Class: 3

Packing group: III

Proper shipping name: ESTERS, N.O.S.

**IMDG**

UN-No: 3272

Class: 3

Packing group: III

EMS-No: F-E, S-D

Marine pollutant: No

Proper shipping name: ESTERS, N.O.S.

IATA

UN-No: 3272

Class: 3

Packing group: III

Proper shipping name: ESTERS, N.O.S.

15. REGULATORY INFORMATION

Component	CHINA	TSCA	ENCS	EINECS
Propylene glycol monomethyl ether acetate	✓	✓	✓	✓

Note1:

CHINA – China Inventory of Existing Chemical Substance

TSCA – United States Toxic Substances Control Act Section 8(b) Inventory

ENCS – Japan Existing and New Chemical Substances

EINECS – European Inventory of Existing Commercial Chemical Substances

Note2:

- ✓ Indicates that the substances included in the regulations
- That no data or included in the regulations

*Ordinances on Chem. Safety Supervision.***Application Regulation**

1. Enforcement Rules of the Occupational Safety and Health Act.
2. Regulation of Labelling and Hazard Communication of Dangerous and Harmful Materials.
3. Organic solvent poisoning prevention rules.
4. Standards of Permissible Exposure Limits of Airborne Hazardous Substances in Workplace.
5. Road and Traffic Safety Rules.
6. Waste storage and disposal methods and facilities setup standard.
7. Public Hazardous Substances & Flammable Pressurized Gases Establishment Standards & Safety Control Regulations.



16. OTHER INFORMATION

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