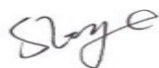


# MSDS Report

<b>Prepared For :</b>	PT XIZI ERA INDO JALAN KARET 2 NO.12, KEL. KRANJI, KEC. BEKASI BARAT, KOTA, BEKASI, PROP. JAWA BARAT
<b>Product Name:</b>	METHYL METHACRYLATE
<b>Model :</b>	N/A
<b>Trade Mark:</b>	XIZI
<b>Prepared By :</b>	Shenzhen SHT Testing Technology Co., Ltd. 205, Bldg C, Xiangzhihuigu, No.58 Nanlian Rd, Longgang Dist, Shenzhen, Guangdong
<b>Date of Report :</b>	Mar. 25, 2021
<b>Report No.:</b>	SHT2103002R

Checked by:



Approved by:



Date:

2021.03.25

# Material Safety Data Sheet

## Section 1- Chemical Product & Company Identification

**Product Name:** METHYL METHACRYLATE

**Synonymous name:** METHACRYLIC ACID, METHYL ESTER, METHYL alpha-METHYL ACRYLATE, METHYL 2-METHYL-2-PROPENOATE, METHYL 2-METHYL PROPENOATE, 2-METHYL PROPANOIC ACID, METHYL ESTER, MMA

**Chemical formula:** CH<sub>2</sub>C(CH<sub>3</sub>)COOCH<sub>3</sub>

**Manufacture:** PT XIZI ERA INDO

**Address:** JALAN KARET 2 NO.12, KEL. KRANJI, KEC. BEKASI BARAT, KOTA, BEKASI, PROP. JAWA BARAT

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## Section 2- Composition/Information on Ingredients

### METHYL METHACRYLATE

Chemical Name	Wt %	CAS No.
Methyl methacrylate	86.73	80-62-6
Water	5.22	7732-18-5
Methanol	3.85	67-56-1/170082-17-4
Light fraction	3.12	--
Heavy fraction	1.08	--

## Section 3- Hazards Identification

**Hazard Category:** Class 3 flammable liquid.

**Inhalation:** Inhalation, Ingestion, Eyes and Skin contact.

**Health hazard:** High concentration steam may cause headache, nausea, etc. Very high concentrations may cause loss of consciousness and death. May cause severe allergy to respiratory tract and skin.

**Environment risks:** Please refer to 12th chapter of MSDS.

**Combustion hazard:** Highly flammable liquid and vapor.

## Section 4- First Aid Measures

### **Skin contact:**

Avoid direct contact with this chemical and wear impervious gloves if necessary.

Immediately rinse the contaminated area with running warm water for more than 20 minutes.

Remove contaminated clothing, shoes and leather products.

Confirm that contaminated clothing, shoes and leather products must be completely decontaminated before reuse or discard.

Seek medical attention if you feel unwell.

### **Eye contact:**

Open your eyelids immediately and rinse gently with running warm water for more than 20 minutes.

Be careful not to let the washed water spread to uncontaminated eyes.

Seek medical attention immediately.

### **Inhalation:**

Before rescue, determine your own safety, preferably a two-person rescue method.

Remove the source of contamination or move the patient to fresh air.

If breathing stops, artificial respiration is given by trained personnel; if the heartbeat stops, cardiopulmonary resuscitation (avoid mouth-to-mouth contact)

Under the direction of a physician, oxygen may be beneficial to the patient by trained personnel.

Seek medical attention immediately.

### **Ingestion:**

If the patient is about to lose consciousness, or has lost consciousness or cramps, do not give anything by mouth.

Let the patient gargle thoroughly.

Do not induce vomiting.

Give the patient 240-300 ml of water.

If the patient vomits spontaneously, lean forward to reduce the hazard of inhaled vomit.

Seek medical attention immediately.

**Most important symptoms/effects, acute and delayed:** At very high concentrations, it may even lose consciousness and cause death from pulmonary edema.

**Protection of first aid personnel:** First aid should be carried out in a safe area while wearing protective equipment.

**Tips for doctors:** When patients swallow, consider gastric lavage and activated carbon.

## Section 5- Fire Fighting Measures

**Danger characteristic:** Liquids and vapours are flammable, their vapours are heavier than air, they are easy to spread to distant places, and they may cause flashback in case of fire. The liquid will float on the water and spread the fire. Hazardous with reaction. Vapors or liquids without polymerization inhibitors, heated or exposed to sunlight or incompatible materials, may cause explosive polymerization. Closed containers may rupture violently when heated.

**Fire-Fighting media:** Dry chemical powder, foam, carbon dioxide.

**Fire extinguishing methods:**

Because of its low flash point and floating on the water, it is generally not suitable for extinguishing with water.

However, water mist can be sprayed at a safe distance to absorb the heat in the fire, cool the outside of the container and protect the material exposed to the fire.

If there is leakage, the water spray mist can also protect the person who performs the leakage stop, and disperse the formed vapor, and at the same time wash away the leakage to avoid exposure.

In a fire, steam may converge, blocking the exhaust function. In addition, closed containers may burst.

When the safety vent valve of the tank has sounded or changed color due to fire, it will be evacuated immediately.

**Fire-fighting precautions:** As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.

## Section 6- Accidental Release Measures

**Operator protection measures, protective equipment and emergency handling procedures:**

Before the contaminated area is completely cleaned, personnel are restricted from accessing the area.

Make sure that cleaning is performed by trained personnel.

Wear appropriate personal protective equipment. Avoid breathing vapor, mist, gas or dust.

**Environmental protection measures:**

Ventilate the area.

Remove all ignition sources.

Emissions to the environment must be avoided.

Report to relevant government safety and health departments.

**Methods and materials for containment and disposal of spilled chemicals:**

Do not touch the leaked material.

Avoid leakage into the sewer or confined space.

If security permits, try to prevent or reduce spillage.

Absorb spilled material with soil, sand or absorbent that does not react with spilled material.

The contaminated absorbent has the same harm as the leakage.

A small amount of leakage: after absorption with an absorbent that does not react with the leakage, place it in a suitable, covered and marked container, and then rinse the area with water.

Mass leakage: Contact the fire and emergency treatment center for assistance.

## Section 7- Handling and Storage

### **Operation note:**

Operators should be specially trained and strictly abide by the operating procedures.

Handling is performed in a well ventilated place.

Wear suitable protective equipment.

Avoid contact with eyes and skin. Avoid breathing vapor.

Keep away from heat/sparks/open flames/ hot surfaces.

Use explosion-proof ventilation systems and equipment.

If canning is required, the flow rate should be controlled and there is a grounding device to prevent the accumulation of static electricity.

Handle lightly when moving to prevent damage to packaging and containers.

Equipped with the corresponding variety and quantity of fire fighting equipment and leakage emergency treatment equipment.

The remains of Hazardous materials is inside empty containers.

### **Storage note:**

Keep containers tightly closed.

Keep containers in a dry, cool and well-ventilated place. Prevent from direct sunlight.

Keep away from heat/sparks/open flames/hot surfaces.

Store away from incompatible materials and foodstuff containers.

Keep the container sealed and label it.

Use explosion-proof lighting and ventilation settings.

It is forbidden to use equipment and tools that easily generate sparks.

When stored in small quantities, qualified explosion-proof freezer can be used.

Limited storage to avoid unrelated personnel from approaching the area.

The storage area should be far away from the work place and warning signs should be posted.

Check the container regularly for damage or leaks.

Equipped with corresponding varieties and a number of fire equipment.

Storage area should be equipped with emergency treatment equipment and suitable for resettlement material.

## Section 8 - Exposure Controls/Personal Protection

### Occupational Exposure limit values:

Composition	CAS No.	Standard source	Type	Standard Value	Remark
Methyl Methacrylate	80-62-6	GBZ 2.1-2019	MAC	--	Sensitization
			PC-TWA	100 mg/m <sup>3</sup>	
			PC-STEL	--	

Sensitization--May have a sensitizing effect.

**Monitoring methods:** GBZ/T 300.1 ~ GBZ/T 600.160-2017 Determination of toxic substances in workplace air (Series Standard), EN 14042 Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents

### Engineering Control:

It is recommended that the workplace be separated from other workplaces.

Closed operation to prevent leakage.

Ensure adequate ventilation, especially in restricted areas.

Make sure the eyewash equipment and safety shower equipment are close to the workstation.

Use explosion-proof electrical, ventilation, lighting, equipment.

Set up automatic alarm devices and accident ventilation facilities.

Set up emergency evacuation channels and necessary diarrhea areas.

Set red area warning lines, warning signs and Chinese warning instructions, and set up a communication alarm system.

Operate in accordance with good industrial hygiene and safety regulations.

**Respiratory Protection:** If the risk assessment shows that air-purifying gas masks are required, use a full-face multi-function gas mask (US) or ABEK (EN 14387) gas mask tube as a candidate for engineering control. If the gas mask is the only way to protect, then use a full face mask air supply gas mask. The respirator uses respirator and parts that have been tested and passed government standards such as NIOSH (US) or CEN (EU).

**Eyes Protection:** For masks and safety glasses, use equipment tested and approved by official standards such as NIOSH (USA) or EN 166 (EU) to protect the eyes.

**Body Protection:** Wear anti-static overalls Anti-permeation work clothes. The type of protective equipment must be selected according to the concentration and content of the dangerous substance in the specific workplace.

**Hands Protection:** Wear impervious gloves.

**Other Protections:** No smoking, dining and drinking water in the workplace. Keep good habit of hygiene.

## Section 9- Physical and Chemical Properties

**Appearance:** Clear colorless liquid with a strong spicy taste.

**pH:** no data available.

**Boiling point/range:** 100-101°C.

**Melting point/range:** -48°C.

**Flashpoints:** 2°C Closed cup.

**Explosive limits:** 1.7% -8.2%.

**Auto-ignition temperature:** 435°C.

**Relative density (water = 1):** 0.944.

**Vapor density (Air = 1):** 3.5.

**Vapour pressure:** 29 mmHg @20°C.

**Solubility:** 1.5g/100 ml (Water).

**Proportion(Water=1):** no data available.

**Evaporation rate:** no data available.

## Section 10 – Stability and Reactivity

**Stability:** The liquid is stable under the condition of polymerization inhibitor, and the vapor may polymerize violently.

**Prohibited content:** Strong oxidants (such as peroxides, nitrates), strong bases, strong acids, metal catalysts (such as copper or iron).

**Conditions to Avoid:** Insufficient polymerization inhibitor, heated, exposed to strong light, mixed with incompatible materials, in vapor state.

**Hazardous Polymerization:** Strong oxidants (eg peroxides, nitrates), strong bases, strong acids: can cause explosive polymerization reactions. Metal catalysts (such as copper or iron): Will cause explosive polymerization reactions.

**Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide.

## Section 11 – Toxicological Information

### Acute Toxicity:

LD50 oral dose-rat-7872 mg / kg

Remarks: Muscle-weak behavior: coma, breathing disorders

LC50 Inhalation-Rat-4 h-78000 mg / m<sup>3</sup>

LD50 percutaneous-rabbit-> 5,000 mg / kg

Remarks: Long-term skin contact can cause skin irritation and / or dermatitis.

**Sub-acute and Chronic Toxicity:** Not applicable.

**Irritation:** May cause eye, skin and respiratory tract irritation.

**Sensitization:** May cause skin sensitization.

**Mutagenicity:** no data available.

**Carcinogenicity:** no data available.

**Others:** no data available.

## Section 12 – Ecological Information

**Eco-toxicity:** no data available.

**Biodegradable:** no data available.

**Non-biodegradable:** no data available.

**Bioconcentration or biological accumulation:** no data available.

**Other harmful effects:** This substance may be harmful to the environment. Special attention should be given to water bodies.

## Section 13 – Disposal Considerations

**Nature of waste:** no data available.

**Waste disposal methods:** Hand over the remaining and non-recyclable solutions to a licensed company. This product must not be disposed of by discharge into the sewer.

**Attention abandoned:** Refer to relevant national and local regulations before disposal.

## Section 14 – Transport Information

**UN Number:** UN 1247.



**Packaging Mark:** .

**Packaging categories:** II categories.

**Packaging Method:** Pack as recommended by the manufacturer.

**Transport Attentions:**

At the time of shipment, the packaging should be complete and the loading should be secure. During



transportation, make sure that the container does not leak, collapse, fall or damage.

Transport vehicles should be equipped with corresponding types and quantities of fire-fighting equipment and leakage emergency treatment equipment.

It is strictly prohibited to mix and transport with oxidants and edible chemicals.

The exhaust pipe of the vehicle carrying the item must be equipped with a flame arrestor.

It should be protected from exposure to sunlight, rain and high temperature during transportation.

When staying on the way, keep away from fire, heat source and high temperature area.

Road transportation should follow the prescribed route, do not stop in residential areas and densely populated areas.

## Section 15 – Regulatory Information

Regulations on the Safety Management of Dangerous Chemicals (promulgated by the State Council on January 26, 2002, revised on February 16, 2011): Corresponding provisions have been made for the safe use, production, storage, transportation, loading and unloading of dangerous chemicals.

## Section 16 – Additional Information

**References:** no data available.

**Guidance departments:** no data available.

**Data audit unit:** no data available.

**Laws Help:** no data available.

**Other Information:** The information above is believed to be accurate and represents the best information currently available to us. However, concordé makes no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. Although reasonable precautions have been taken in the preparation of the data contained herein, it is offered solely for your information, consideration and investigation. This material safety data sheet provides guidelines for the safe handling and use of this product; it does not and cannot advise on all possible situations, therefore, your specific use of this product should be evaluated to determine if additional precautions are required.

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**\*\*\*End of report\*\*\***