

**1. PRODUCT AND COMPANY IDENTIFICATION**

Product Name : SUMIPEX (PMMA Molding Resins)  
Manufacturer : Singapore Methyl Methacrylate Pte. Ltd. (SMP Plant)  
Address : No. 17, Sakra Road, Singapore 627886  
Telephone Number : (65) 6867-6352  
Fax Number : (65) 6867-6182

**2. PRODUCT INFORMATION**

Chemical Name : poly methyl methacrylate (PMMA)  
Synonyms : poly(methyl 2-methylpropenoate)  
Molecular Formula :  $(C_2H_8O_2)_x$   
CAS Number : 9011-14-7

**3. PHYSICAL PROPERTIES**

Appearance : Crystal-clear solid pellets  
Odor : Odorless  
Specific Gravity : 1.2 (H<sub>2</sub>O = 1)  
Melting Point : > 120 °C  
Solubility in Water : Insoluble

**4. FIRE & EXPLOSION HAZARDS DATA**

Flash point : Not applicable  
Flammable limits : Not applicable  
Auto-ignition temperature : Not applicable

**5. STABILITY AND REACTIVITY**

Stability & Reactivity : Stable under normal temperatures and pressures.  
Incompatibility : Strong oxidizing agents, strong bases, amines, alkalis.  
Decomposition : Decomposed with heat. Hazardous, flammable gases/vapors produced are carbon monoxide, carbon dioxide and methyl-methacrylate monomer.  
Hazardous Polymerization : Has not been reported.  
Conditions to avoid : Incompatible materials, excess heat, strong oxidants.  
Ignition temperature : > 400 °C



## 6. HAZARDS IDENTIFICATION

Emergency overview	:	Crystal-clear solid pellets that present no immediate hazard under ordinary condition of use and storage
Potential health effects	:	<u>Inhalation</u> - Unlikely to be hazardous unless heated. Monomer vapors from heated products may cause irritation, nausea, headache and dizziness. <u>Eye Contact</u> – May cause irritation <u>Skin Contact</u> - Non-irritating. Practically non-toxic. Molten material (hot) may cause severe scalds. <u>Ingestion</u> – May cause irritation of the digestive tract. <u>Chronic</u> - No known effects
Exposure controls / Engineering measures	:	Use local ventilation at places where the dust can be released into the workplace air. The dust may be combustible when exposed to heat, flame, or oxidizing agents.

## 7. TOXICOLOGICAL INFORMATION

Chronic effects / carcinogenicity	:	No data available. Not listed by IARC, NTP or OSHA.
Mutagenicity	:	No data available

## 8. PERSONAL PROTECTION

Respiratory	:	None required for occasional handling if adequate ventilation is available. A dust respirator is recommended for prolonged handling or exposure.
Hand Protection	:	When handling hot material, wear thermal resistant gloves.
Eye Protection	:	Wear safety goggles or equivalent eye protection devices.
Others	:	Wear appropriate protective clothing for preventing skin contact.
Work/Hygiene practices	:	Always keep protective equipment and workplace clean.

## 9. FIRST AID MEASURES

Inhalation	:	Remove from exposure to fresh air immediately, and provide oxygen or give artificial respiration and call a physician if breathing is difficult.
Skin contact	:	Get medical aid. Wash rapidly with plenty of water while removing contaminated clothing and shoes.
Eye contact	:	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Ingestion	:	Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.

**10. FIRE FIGHTING MEASURES**

- Extinguishing media : Use agent most appropriate to extinguish fire. Use water spray, dry chemical, carbon dioxide, or appropriate foam.
- Special fire fighting procedures : Keep personnel removed from upwind of fire. Wear appropriate safety equipment for fire conditions, including self-contained breathing apparatus and other protective equipment or garments. Cool tank/container with water spray.

**11. ACCIDENTAL RELEASE MEASURES**

- Spills or Leaks : Vacuum or sweep material and place in a suitable disposal container. Keep walking surface free from spilled products to avoid a slipping hazard. Provide ventilation.

**12. HANDLING AND STORAGE**

- Precautions for storage & handling : Store in a cool and dry, well ventilated area, away from incompatible substances.
- Wash thoroughly after handling. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Use with adequate ventilation. May form explosive dust-air mixture. Avoid ingestion and inhalation.

**13. DISPOSAL CONSIDERATIONS**

- Product disposal : May be buried in an authorized landfill site or be incinerated under approved controlled condition. Disposal should be in accordance with local, state and/or national legislation. The owner of the material is responsible for proper waste disposal.

**14. TRANSPORT INFORMATION**

- Regulations : Not regulated.

**15. ECOLOGICAL INFORMATION**

- Aquatic Toxicity : No information available.

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