Polymethyl methacrylate Standard

SAFETY DATA SHEET

Section 1. Identification

Product identifier : Polymethyl methacrylate Standard

Chemical identity : 2-Propenoic acid, 2-methyl-, methyl ester, homopolymer

Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Reagents and Standards for Analytical Chemistry Laboratory Use

PL2022-2001 PMMA NOMINAL MP 500 1G
PL2022-2005 PMMA NOMINAL MP 500 5G
PL2022-2010 PMMA nominal Mp 500 10g
PL2022-3001 PMMA nominal Mp 1k 1g
PL2022-3005 PMMA nominal Mp 1k 5g
PL2022-3010 PMMA nominal Mp 1k 10g
PL2022-5001 PMMA nominal Mp 2k 1g
PL2022-5005 PMMA nominal Mp 2k 5g
PL2022-5010 PMMA nominal Mp 2k 10g
PL2022-6001 PMMA nominal Mp 3k 1g
PL2022-6005 PMMA nominal Mp 3k 5g
PL2022-6010 PMMA nominal Mp 3k 10g
PL2022-7001 PMMA nominal Mp 5k 1g
PL2022-7005 PMMA nominal Mp 5k 5g
PL2022-7010 PMMA nominal Mp 5k 10g
PL2022-8001 PMMA nominal Mp 7k 1g
PL2022-8005 PMMA nominal Mp 7k 5g
PL2022-8010 PMMA nominal Mp 7k 10g
PL2022-9001 PMMA nominal Mp 10k 1g
PL2022-9005 PMMA nominal Mp 10k 5g
PL2022-9010 PMMA nominal Mp 10k 10g
PL2023-0001 PMMA nominal Mp 13k 1g
PL2023-0005 PMMA nominal Mp 13k 5g
PL2023-0010 PMMA nominal Mp 13k 10g
PL2023-1001 PMMA nominal Mp 20k 1g
PL2023-1005 PMMA nominal Mp 20k 5g
PL2023-1010 PMMA nominal Mp 20k 10g
PL2023-2001 PMMA nominal Mp 30k 1g
PL2023-2005 PMMA nominal Mp 30k 5g
PL2023-2010 PMMA nominal Mp 30k 10g
PL2023-3001 PMMA nominal Mp 50k 1g
PL2023-3005 PMMA nominal Mp 50k 5g
PL2023-3010 PMMA nominal Mp 50k 10g
PL2023-4001 PMMA nominal Mp 70k 1g
PL2023-4005 PMMA nominal Mp 70k 5g
PL2023-4010 PMMA nominal Mp 70k 10g
PL2023-5001 PMMA nominal Mp 100k 1g
PL2023-5005 PMMA nominal Mp 100k 5g
Section 1. Identification

PL2023-5010  PMMA nominal Mp 100k 10g
PL2023-6001  PMMA nominal Mp 130k 1g
PL2023-6005  PMMA nominal Mp 130k 5g
PL2023-6010  PMMA nominal Mp 130k 10g
PL2023-7001  PMMA nominal Mp 200k 1g
PL2023-7005  PMMA nominal Mp 200k 5g
PL2023-7010  PMMA nominal Mp 200k 10g
PL2023-8001  PMMA nominal Mp 300k 1g
PL2023-8005  PMMA nominal Mp 300k 5g
PL2023-8010  PMMA nominal Mp 300k 10g
PL2023-9001  PMMA nominal Mp 500k 1g
PL2023-9005  PMMA nominal Mp 500k 5g
PL2023-9010  PMMA nominal Mp 500k 10g
PL2024-0001  PMMA nominal Mp 700k 1g
PL2024-0005  PMMA nominal Mp 700k 5g
PL2024-0010  PMMA nominal Mp 700k 10g
PL2024-1001  PMMA nominal Mp 1m 1g
PL2024-1005  PMMA nominal Mp 1m 5g
PL2024-1010  PMMA nominal Mp 1m 10g
PL2024-2001  PMMA nominal Mp 1.5m 1g
PL2024-2005  PMMA nominal Mp 1.5m 5g
PL2024-2010  PMMA nominal Mp 1.5m 10g

Supplier/Manufacturer : Agilent Technologies Australia Pty Ltd
679 Springvale Road
Mulgrave
Victoria 3170, Australia
1800 802 402

Emergency telephone number (with hours of operation) : CHEMTREC®: +(61)-290372994

Section 2. Hazard(s) identification

Classification of the substance or mixture
Not classified.

GHS label elements
Signal word : No signal word.
Hazard statements : No known significant effects or critical hazards.
Precautionary statements
Prevention : Not applicable.
Response : Not applicable.
Storage : Not applicable.
Disposal : Not applicable.
Supplemental label elements
Additional warning phrases : Not applicable.
Other hazards which do not result in classification : May form combustible dust concentrations in air.
Section 3. Composition and ingredient information

Substance/mixture: Substance

CAS number/other identifiers

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>% (w/w)</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propenoic acid, 2-methyl-, methyl ester, homopolymer</td>
<td>100</td>
<td>9011-14-7</td>
</tr>
</tbody>
</table>

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

The total concentration of ingredients in this product, reported or not in this section, is 100%.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion: Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

Inhalation: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

Skin contact: No known significant effects or critical hazards.

Ingestion: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following: irritation, redness.

Inhalation: Adverse symptoms may include the following: respiratory tract irritation, coughing.

Skin contact: No specific data.

Ingestion: No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments: No specific treatment.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)
### Section 5. Firefighting measures

#### Extinguishing media
- **Suitable extinguishing media**: Use dry chemical powder.
- **Unsuitable extinguishing media**: Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.

#### Specific hazards arising from the chemical
- **Hazardous thermal decomposition products**: Decomposition products may include the following materials:
  - Carbon dioxide
  - Carbon monoxide

- **Special hazards arising from the chemical**: May form explosible dust-air mixture if dispersed.

- **Special protective actions for fire-fighters**: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

- **Special protective equipment for fire-fighters**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

### Section 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures
- **For non-emergency personnel**: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spill material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Put on appropriate personal protective equipment.

- **For emergency responders**: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

#### Environmental precautions
- Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

#### Methods and material for containment and cleaning up
- **Methods for cleaning up**: Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.

### Section 7. Handling and storage

#### Precautions for safe handling
- **Protective measures**: Put on appropriate personal protective equipment (see Section 8). Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material.

- **Advice on general occupational hygiene**: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propenoic acid, 2-methyl-, methyl ester, homopolymer</td>
<td>ACGIH TLV (United States). Particulates Not Otherwise Specified (PNOS): 10 mg/m³ Form: Inhalable Particulates Not Otherwise Specified (PNOS): 3 mg/m³ Form: Respirable</td>
</tr>
</tbody>
</table>

Biological exposure indices

No exposure indices known.

Appropriate engineering controls

Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. If operating conditions cause high dust concentrations to be produced, use dust goggles.

Skin protection

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Section 8. Exposure controls and personal protection

Respiratory protection: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state: Solid. [Powder.]

Colour: White.

Odour: Not available.

Odour threshold: Not available.

pH: Not available.

Melting point/freezing point: >150°C (>302°F)

Boiling point, initial boiling point, and boiling range: Not available.

Flash point: Closed cup: >250°C (>482°F)

Evaporation rate: Not available.

Flammability: Not available.

Lower and upper explosion limit/flammability limit: Not applicable.

Vapour pressure: Not available.

Relative vapour density: Not applicable.

Relative density: Not available.

Density: 1.2 g/cm³

Solubility(ies):

<table>
<thead>
<tr>
<th>Media</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>Not soluble</td>
</tr>
</tbody>
</table>

Partition coefficient: n-octanol/water: Not available.

Auto-ignition temperature: Not applicable.

Decomposition temperature: Not available.

Viscosity: Not applicable.

Particle characteristics

Median particle size: Not available.

Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: The product is stable.

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid: Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Prevent dust accumulation.
Section 10. Stability and reactivity

Incompatible materials: Reactive or incompatible with the following materials: oxidising materials. Incompatible materials: Alkali, Amine.

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity
Not available.

Irritation/Corrosion
Not available.

Sensitisation
Not available.

Mutagenicity
Conclusion/Summary: Not available.

Carcinogenicity
Conclusion/Summary: Not available.

Reproductive toxicity
Conclusion/Summary: Not available.

Teratogenicity
Conclusion/Summary: Not available.

Specific target organ toxicity (single exposure)
Not available.

Specific target organ toxicity (repeated exposure)
Not available.

Aspiration hazard
Not available.

Information on likely routes of exposure

Potential acute health effects

Eye contact: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

Inhalation: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

Skin contact: No known significant effects or critical hazards.

Ingestion: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following: irritation, redness.

Inhalation: Adverse symptoms may include the following: respiratory tract irritation, coughing.

Skin contact: No specific data.

Ingestion: No specific data.
Section 11. Toxicological information

Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Short term exposure**
- **Potential immediate effects**: Not available.
- **Potential delayed effects**: Not available.

**Long term exposure**
- **Potential immediate effects**: Not available.
- **Potential delayed effects**: Not available.

**Potential chronic health effects**
- **General**: Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
- **Carcinogenicity**: No known significant effects or critical hazards.
- **Mutagenicity**: No known significant effects or critical hazards.
- **Reproductive toxicity**: No known significant effects or critical hazards.

**Numerical measures of toxicity**

**Acute toxicity estimates**
- N/A

**Other information**: Adverse symptoms may include the following: Very slightly to slightly dangerous in case of skin contact (corrosive, irritant, sensitiser, permeator), eye contact (irritant), ingestion or inhalation.

Section 12. Ecological information

**Toxicity**
- Not available.

**Persistence and degradability**
- Not available.

**Bioaccumulative potential**
- Not available.

**Mobility in soil**
- **Soil/water partition coefficient (K<sub>oc</sub>)**: Not available.

**Other adverse effects**: The products of degradation are more toxic than the product itself.

Section 13. Disposal considerations

**Disposal methods**: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain...
Section 13. Disposal considerations

some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

ADG / IMDG / IATA : Not regulated as Dangerous Goods according to the ADG Code.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

Standard for the Uniform Scheduling of Medicines and Poisons
Not regulated.

Model Work Health and Safety Regulations - Scheduled Substances
No listed substance

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals
Not listed.

Montreal Protocol
Not listed.

Stockholm Convention on Persistent Organic Pollutants
Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)
Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals
Not listed.

Inventory list

Australia : This material is listed or exempted.
Canada : This material is listed or exempted.
China : This material is listed or exempted.
Eurasian Economic Union : Russian Federation inventory: This material is listed or exempted.
Japan : Japan inventory (CSCL): This material is listed or exempted.
Japan inventory (ISHL): This material is listed or exempted.
New Zealand : This material is listed or exempted.
Philippines : This material is listed or exempted.
Republic of Korea : This material is listed or exempted.
Taiwan : This material is listed or exempted.
Thailand : This material is listed or exempted.
Turkey : This material is listed or exempted.
United States : This material is active or exempted.
Viet Nam : This material is listed or exempted.
Section 16. Any other relevant information

History

| Date of issue/Date of revision | : 21/10/2022 |
| Date of previous issue         | : 25/09/2019 |
| Version                       | : 5 |

Key to abbreviations

ADG = Australian Dangerous Goods
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
N/A = Not available
SUSMP = Standard Uniform Schedule of Medicine and Poisons
UN = United Nations

Procedure used to derive the classification

<table>
<thead>
<tr>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not classified.</td>
</tr>
</tbody>
</table>

Indicates information that has changed from previously issued version.

Notice to reader

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