



**Kit Name:** ReadyCal-Kit Poly(methyl methacrylate) low, pre-weighted calibration kit, nominal Mp 200 - 70,000 g/mol, 3 x 10 Vials, 1.5ml

**Kit PN:** PSS-MMKITR1L

This product is a kit, composed of the following individual chemical components:

### Kit Components

| PSS Component Part Number | Component Name   | Volume or mass/ container and unit |
|---------------------------|--|------------------------------------|
| PSS-mm202                 | Polymethylmethacrylate standard, nominal Mw 202 g/mol, 1 g   | 0.01 g                             |
| PSS-mm402                 | Polymethylmethacrylate standard, nominal Mw 402 g/mol, 1 g   | 0.01 g                             |
| PSS-mm600                 | Polymethylmethacrylate standard, nominal Mw 600 g/mol, 1 g   | 0.01 g                             |
| PSS-mm1.2K                | Polymethylmethacrylate standard, nominal Mw 1200 g/mol, 1 g  | 0.01 g                             |
| PSS-mm2.1K                | Polymethylmethacrylate standard, nominal Mw 2100 g/mol, 1 g  | 0.01 g                             |
| PSS-mm3K                  | Polymethylmethacrylate standard, nominal Mw 3000 g/mol, 1 g  | 0.01 g                             |
| PSS-mm6.5K                | Polymethylmethacrylate standard, nominal Mw 6500 g/mol, 1 g  | 0.01 g                             |
| PSS-mm8K                  | Polymethylmethacrylate standard, nominal Mw 8000 g/mol, 1 g  | 0.01 g                             |
| PSS-mm14K                 | Polymethylmethacrylate standard, nominal Mw 14000 g/mol, 1 g | 0.01 g                             |
| PSS-mm30K                 | Polymethylmethacrylate standard, nominal Mw 30000 g/mol, 1 g | 0.01 g                             |
| PSS-mm47K                 | Polymethylmethacrylate standard, nominal Mw 47000 g/mol, 1 g | 0.01 g                             |
| PSS-mm70K                 | Polymethylmethacrylate standard, nominal Mw 70000 g/mol, 1 g | 0.01 g                             |

Applicable SDS/s for each component follow this cover sheet.

## 1. Identification of the substance and of the company

### 1.1 Product identifiers

Product name Polymethylmethacrylate standard, nominal Mw 202 g/mol, 1 g  
[ItemNo: PSS-MM202]

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

Identified uses Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company PSS Polymer Standards Service GmbH  
In der Dalheimer Wiese 5  
D - 55120 Mainz

Technical phone +49 6131 - 96239 - 0  
Fax +49 6131 - 96239 -11  
Email sds@pss-polymer.com

### 1.4 Emergency telephone number

24-hour emergency contact number: +1 872 5888271 (PSS)

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## 2. Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008

Flammable liquids (Category 2), H225  
Acute toxicity, Inhalation (Category 4), H332

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 Label elements

#### Labelling according to Regulation (EC) No 1272/2008 [CLP]

Pictogram



|                                |  |
|--------------------------------|--|
| Signal word                    | Danger   |
| Hazard statement(s)            |  |
| H225                           | Highly flammable liquid and vapour.                                |
| H332                           | Harmful if inhaled.  |
| Precautionary statement(s)     |  |
| P210                           | Keep away from heat/sparks/open flames/hot surfaces. - No smoking. |
| Supplemental Hazard Statements | none   |

### 2.3 Other hazards

none

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## 3. Composition / information on ingredients

### 3.1 Substances

Synonyms: mmp2  
Formula:  $[\text{CH}_2\text{C}(\text{CH}_3)(\text{CO}_2\text{CH}_3)]_2$

Product name: Poly(methyl methacrylate) P2  
Date Updated: 2023-01-20  
Version: 1.4

## Hazardous ingredients according to Regulation (EC) No 1272/2008

| Component | Classification                            | Concentration |
|-----------|---|---------------|
| mmp2      | Flam. Liq. 2; Acute Tox. 4;<br>H225, H332 | <=100%        |

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

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## 4. First aid measures

### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.1 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

### 4.2 Indication of any immediate medical attention and special treatment needed

no data available

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## 5. Fire fighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

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

### 5.2 Special hazards arising from the substance or mixture

Carbon oxides

### 5.3 Advice for fire fighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

Use water spray to cool unopened containers.

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## 6. Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

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.

For personal protection see section 8.

### 6.2 Environmental precautions

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

### 6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

### 6.4 Reference to other sections

For disposal see section 13.

Product name: Poly(methyl methacrylate) P2

Date Updated: 2023-01-20

Version: 1.4

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## 7. Handling and storage

### 7.1 Precautions for safe handling

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.

### 7.2 Conditions for safe storage, including any incompatibilities

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.

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

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## 8. Exposure controls / personal protection

### 8.1 Control parameters

Components with workplace control parameters

### 8.2 Exposure controls

#### Appropriate engineering controls

General industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

##### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves must satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

##### Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts is desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|  |                   |
|--|-------------------|
| Appearance                                   | Form: liquid      |
| Odour  | no data available |
| Odour Threshold                              | no data available |
| pH   | no data available |
| Melting point/freezing point                 | no data available |
| Initial boiling point and boiling range      | no data available |
| Flash Point                                  | no data available |
| Evaporation rate                             | no data available |
| Flammability                                 | no data available |
| Upper/lower flammability or explosive limits | no data available |
| Vapour pressure                              | no data available |
| Vapour density                               | no data available |

Product name: Poly(methyl methacrylate) P2  
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Version: 1.4

|   |                   |
|---|-------------------|
| Relative density                        | no data available |
| Water solubility                        | no data available |
| Partition coefficient: n- Octanol/Water | no data available |
| Auto ignition temperature               | no data available |
| Decomposition temperature               | no data available |
| Viscosity                               | no data available |
| Explosive properties                    | no data available |
| Oxidizing properties                    | no data available |

## 9.2 Other safety information

no data available

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## 10. Stability and reactivity

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight.

### 10.5 Incompatible materials

Oxidizing agents, Bases, acids

### 10.6 Hazardous decomposition products

Other decomposition products - no data available

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## 11. Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

no data available

#### Skin corrosion/irritation

no data available

#### Serious eye damage/eye irritation

no data available

#### Respiratory or skin sensitisation

no data available

#### Germ cell mutagenicity

no data available

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### Reproductive toxicity

no data available

#### Specific target organ toxicity - single exposure

no data available

#### Specific target organ toxicity - repeated exposure

no data available

#### Aspiration hazard

no data available

#### Potential health effects

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion** May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.

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**Eyes** May cause eye irritation.

**Signs and Symptoms of Exposure**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Additional Information**

RTECS: Not available

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**12. Ecological information**

**12.1 Toxicity**

no data available

**12.2 Persistence and degradability**

no data available

**12.3 Bioaccumulative potential**

no data available

**12.4 Mobility in soil**

no data available

**12.5 Results of PBT and vPvB assessment**

no data available

**12.6 Other adverse effects**

no data available

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**13. Disposal considerations**

**13.1 Waste treatment methods**

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

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**14. Transport information**

**14.1 UN number**

ADR/RID: -

ADR/RID: -

ADR/RID: -

**14.2 UN proper shipping name**

ADR/RID:

IMDG:

IATA:

**14.3 Transport hazard class(es)**

ADR/RID: -

ADR/RID: -

ADR/RID: -

**14.4 Packaging group**

ADR/RID: -

ADR/RID: -

ADR/RID: -

**14.5 Environmental hazards**

ADR/RID:

ADR/RID:

ADR/RID:

**14.6 Special precautions for user**

**Further information**

no data available

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**15. Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

no data available

**15.2 Chemical Safety Assessment**

no data available

# Safety Data Sheet



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## 16. Other information

### Full text of H-Statements referred to under sections 2 and 3.

|            |                                     |
|------------|-------------------------------------|
| Acute Tox. | Acute toxicity                      |
| Flam. Liq. | Flammable liquids                   |
| H225       | Highly flammable liquid and vapour. |
| H332       | Harmful if inhaled.                 |

## WARRANTY

The information in this document is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product. PSS GmbH shall not be held liable for any damage resulting from handling or from contact with the above product.

## DISCLAIMER

For R&D use only. Not for drug, household, or other uses.

## 1. Identification of the substance and of the company

### 1.1 Product identifiers

Product name Polymethylmethacrylate standard, nominal Mw 402 g/mol, 1 g  
[ItemNo: PSS-MM402]

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

Identified uses Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company PSS Polymer Standards Service GmbH  
In der Dalheimer Wiese 5  
D - 55120 Mainz

Technical phone +49 6131 - 96239 - 0  
Fax +49 6131 - 96239 -11  
Email sds@pss-polymer.com

### 1.4 Emergency telephone number

24-hour emergency contact number: +1 872 5888271 (PSS)

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## 2. Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008

Flammable liquids (Category 2), H225  
Acute toxicity, Inhalation (Category 4), H332

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 Label elements

#### Labelling according to Regulation (EC) No 1272/2008 [CLP]

Pictogram



|                                |  |
|--------------------------------|--|
| Signal word                    | Danger   |
| Hazard statement(s)            |  |
| H225                           | Highly flammable liquid and vapour.                                |
| H332                           | Harmful if inhaled.  |
| Precautionary statement(s)     |  |
| P210                           | Keep away from heat/sparks/open flames/hot surfaces. - No smoking. |
| Supplemental Hazard Statements | none   |

### 2.3 Other hazards

none

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## 3. Composition / information on ingredients

### 3.1 Substances

Synonyms: mmp4  
Formula:  $[\text{CH}_2\text{C}(\text{CH}_3)(\text{CO}_2\text{CH}_3)]_4$



Product name: Poly(methyl methacrylate) P4  
Date Updated: 2023-01-20  
Version: 1.4

## Hazardous ingredients according to Regulation (EC) No 1272/2008

| <i>Component</i> | <i>Classification</i>                     | <i>Concentration</i> |
|------------------|---|----------------------|
| mmp4             | Flam. Liq. 2; Acute Tox. 4;<br>H225, H332 | <=100%               |

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

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## 4. First aid measures

### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.1 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

### 4.2 Indication of any immediate medical attention and special treatment needed

no data available

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## 5. Fire fighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

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

### 5.2 Special hazards arising from the substance or mixture

Carbon oxides

### 5.3 Advice for fire fighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

Use water spray to cool unopened containers.

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## 6. Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

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.

For personal protection see section 8.

### 6.2 Environmental precautions

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

### 6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

### 6.4 Reference to other sections

For disposal see section 13.

Product name: Poly(methyl methacrylate) P4  
Date Updated: 2023-01-20  
Version: 1.4

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## 7. Handling and storage

### 7.1 Precautions for safe handling

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.

### 7.2 Conditions for safe storage, including any incompatibilities

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.

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

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## 8. Exposure controls / personal protection

### 8.1 Control parameters

Components with workplace control parameters

### 8.2 Exposure controls

#### Appropriate engineering controls

General industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

##### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves must satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

##### Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts is desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|  |                   |
|--|-------------------|
| Appearance                                   | Form: liquid      |
| Odour  | no data available |
| Odour Threshold                              | no data available |
| pH   | no data available |
| Melting point/freezing point                 | no data available |
| Initial boiling point and boiling range      | no data available |
| Flash Point                                  | no data available |
| Evaporation rate                             | no data available |
| Flammability                                 | no data available |
| Upper/lower flammability or explosive limits | no data available |
| Vapour pressure                              | no data available |
| Vapour density                               | no data available |

Product name: Poly(methyl methacrylate) P4  
Date Updated: 2023-01-20  
Version: 1.4

|   |                   |
|---|-------------------|
| Relative density                        | no data available |
| Water solubility                        | no data available |
| Partition coefficient: n- Octanol/Water | no data available |
| Auto ignition temperature               | no data available |
| Decomposition temperature               | no data available |
| Viscosity                               | no data available |
| Explosive properties                    | no data available |
| Oxidizing properties                    | no data available |

## 9.2 Other safety information

no data available

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## 10. Stability and reactivity

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight.

### 10.5 Incompatible materials

Oxidizing agents, Bases, acids

### 10.6 Hazardous decomposition products

Other decomposition products - no data available

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## 11. Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

no data available

#### Skin corrosion/irritation

no data available

#### Serious eye damage/eye irritation

no data available

#### Respiratory or skin sensitisation

no data available

#### Germ cell mutagenicity

no data available

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### Reproductive toxicity

no data available

#### Specific target organ toxicity - single exposure

no data available

#### Specific target organ toxicity - repeated exposure

no data available

#### Aspiration hazard

no data available

#### Potential health effects

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion** May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.

Product name: Poly(methyl methacrylate) P4  
Date Updated: 2023-01-20  
Version: 1.4

**Eyes** May cause eye irritation.

**Signs and Symptoms of Exposure**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Additional Information**

RTECS: Not available

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**12. Ecological information**

**12.1 Toxicity**

no data available

**12.2 Persistence and degradability**

no data available

**12.3 Bioaccumulative potential**

no data available

**12.4 Mobility in soil**

no data available

**12.5 Results of PBT and vPvB assessment**

no data available

**12.6 Other adverse effects**

no data available

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**13. Disposal considerations**

**13.1 Waste treatment methods**

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

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**14. Transport information**

**14.1 UN number**

ADR/RID: -

ADR/RID: -

ADR/RID: -

**14.2 UN proper shipping name**

ADR/RID:

IMDG:

IATA:

**14.3 Transport hazard class(es)**

ADR/RID: -

ADR/RID: -

ADR/RID: -

**14.4 Packaging group**

ADR/RID: -

ADR/RID: -

ADR/RID: -

**14.5 Environmental hazards**

ADR/RID:

ADR/RID:

ADR/RID:

**14.6 Special precautions for user**

**Further information**

no data available

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**15. Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

no data available

**15.2 Chemical Safety Assessment**

no data available

# Safety Data Sheet



Product name: Poly(methyl methacrylate) P4

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## 16. Other information

### Full text of H-Statements referred to under sections 2 and 3.

|            |                                     |
|------------|-------------------------------------|
| Acute Tox. | Acute toxicity                      |
| Flam. Liq. | Flammable liquids                   |
| H225       | Highly flammable liquid and vapour. |
| H332       | Harmful if inhaled.                 |

## WARRANTY

The information in this document is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product. PSS GmbH shall not be held liable for any damage resulting from handling or from contact with the above product.

## DISCLAIMER

For R&D use only. Not for drug, household, or other uses.

## 1. Identification of the substance and of the company

### 1.1 Product identifiers

Product name Polymethylmethacrylate standard, nominal Mw 600 g/mol, 1 g  
[ItemNo: PSS-MM600]

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

Identified uses Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company PSS Polymer Standards Service GmbH  
In der Dalheimer Wiese 5  
D - 55120 Mainz

Technical phone +49 6131 - 96239 - 0  
Fax +49 6131 - 96239 -11  
Email sds@pss-polymer.com

### 1.4 Emergency telephone number

24-hour emergency contact number: +1 872 5888271 (PSS)

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## 2. Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008

Flammable liquids (Category 2), H225  
Acute toxicity, Inhalation (Category 4), H332

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 Label elements

#### Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram



|                                |  |
|--------------------------------|--|
| Signal word                    | Danger   |
| Hazard statement(s)            |  |
| H225                           | Highly flammable liquid and vapour.                                |
| H332                           | Harmful if inhaled.  |
| Precautionary statement(s)     |  |
| P210                           | Keep away from heat/sparks/open flames/hot surfaces. - No smoking. |
| Supplemental Hazard Statements | none   |

### 2.3 Other hazards

none

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## 3. Composition / information on ingredients

### 3.1 Substances

GPC-Mw: about 600 g/mol  
Formula:  $[\text{CH}_2\text{C}(\text{CH}_3)(\text{CO}_2\text{CH}_3)]_n$

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

## 4. First aid measures

### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.1 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

### 4.2 Indication of any immediate medical attention and special treatment needed

no data available

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## 5. Fire fighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

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

### 5.2 Special hazards arising from the substance or mixture

Carbon oxides

### 5.3 Advice for fire fighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

Use water spray to cool unopened containers.

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## 6. Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

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.

For personal protection see section 8.

### 6.2 Environmental precautions

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

### 6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

### 6.4 Reference to other sections

For disposal see section 13.

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## 7. Handling and storage

### 7.1 Precautions for safe handling

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.

### 7.2 Conditions for safe storage, including any incompatibilities

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.

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

---

## 8. Exposure controls / personal protection

### 8.1 Control parameters

Components with workplace control parameters

### 8.2 Exposure controls

#### Appropriate engineering controls

General industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

##### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves must satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

##### Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts is desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

---

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|  |                   |
|--|-------------------|
| Appearance                                   | Form: liquid      |
| Odour  | no data available |
| Odour Threshold                              | no data available |
| pH   | no data available |
| Melting point/freezing point                 | no data available |
| Initial boiling point and boiling range      | no data available |
| Flash Point                                  | no data available |
| Evaporation rate                             | no data available |
| Flammability                                 | no data available |
| Upper/lower flammability or explosive limits | no data available |
| Vapour pressure                              | no data available |
| Vapour density                               | no data available |
| Relative density                             | no data available |
| Water solubility                             | no data available |
| Partition coefficient: n- Octanol/Water      | no data available |
| Auto ignition temperature                    | no data available |
| Decomposition temperature                    | no data available |
| Viscosity                                    | no data available |
| Explosive properties                         | no data available |
| Oxidizing properties                         | no data available |

### 9.2 Other safety information

no data available



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## 10. Stability and reactivity

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight.

### 10.5 Incompatible materials

Oxidizing agents, Bases, acids

### 10.6 Hazardous decomposition products

Other decomposition products - no data available

---

## 11. Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

no data available

#### Skin corrosion/irritation

no data available

#### Serious eye damage/eye irritation

no data available

#### Respiratory or skin sensitisation

no data available

#### Germ cell mutagenicity

no data available

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### Reproductive toxicity

no data available

#### Specific target organ toxicity - single exposure

no data available

#### Specific target organ toxicity - repeated exposure

no data available

#### Aspiration hazard

no data available

#### Potential health effects

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion** May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation.

#### Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### Additional Information

RTECS: Not available

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## 12. Ecological information

### 12.1 Toxicity

no data available

### 12.2 Persistence and degradability

no data available

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## 12.3 Bioaccumulative potential

no data available

## 12.4 Mobility in soil

no data available

## 12.5 Results of PBT and vPvB assessment

no data available

## 12.6 Other adverse effects

no data available

---

## 13. Disposal considerations

### 13.1 Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

#### Contaminated packaging

Dispose of as unused product.

---

## 14. Transport information

### 14.1 UN number

ADR/RID: -

ADR/RID: -

ADR/RID: -

### 14.2 UN proper shipping name

ADR/RID:

IMDG:

IATA:

### 14.3 Transport hazard class(es)

ADR/RID: -

ADR/RID: -

ADR/RID: -

### 14.4 Packaging group

ADR/RID: -

ADR/RID: -

ADR/RID: -

### 14.5 Environmental hazards

ADR/RID:

ADR/RID:

ADR/RID:

### 14.6 Special precautions for user

#### Further information

no data available

---

## 15. Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

no data available

### 15.2 Chemical Safety Assessment

no data available

---

## 16. Other information

Full text of H-Statements referred to under sections 2 and 3.

Acute Tox.

Acute toxicity

Flam. Liq.

Flammable liquids

H225

Highly flammable liquid and vapour.

H332

Harmful if inhaled.

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## WARRANTY

The information in this document is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product. PSS GmbH shall not be held liable for any damage resulting from handling or from contact with the above product.

## DISCLAIMER

For R&D use only. Not for drug, household or other uses.

## 1. Identification of the substance and of the company

### 1.1 Product identifiers

Product name Polymethylmethacrylate standard

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

Identified uses Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company PSS Polymer Standards Service GmbH  
In der Dalheimer Wiese 5  
D - 55120 Mainz

Technical phone +49 6131 - 96239 - 0

Fax +49 6131 - 96239 -11

Email sds@pss-polymer.com

### 1.4 Emergency telephone number

24-hour emergency contact number: +1 872 5888271 (PSS)

---

## 2. Hazards identification

### 2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.  
This substance is not classified as dangerous according to Directive 67/548/EEC.

### 2.2 Label elements

Caution - substance not yet tested completely.

### 2.3 Other hazards

none

---

## 3. Composition/ information on ingredients

### 3.1 Substances

Synonyms: PMMA, Poly(methacrylic acid methyl ester)

Formula:  $[\text{CH}_2\text{C}(\text{CH}_3)(\text{CO}_2\text{CH}_3)]_n$

CAS-No: 9011-14-7

---

## 4. First aid measures

### 4.1 Description of first aid measures

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

#### In case of skin contact

Wash off with soap and plenty of water.

#### In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

### 4.2 Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### 4.3 Indication of any immediate medical attention and special treatment needed

no data available

---

## 5. Fire fighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

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

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## 5.2 Special hazards arising from the substance or mixture

Carbon oxides

## 5.3 Advice for fire fighters

Wear self-contained breathing apparatus for firefighting if necessary.

## 5.4 Further information

no data available

---

## 6. Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapors, mist or gas.

### 6.2 Environmental precautions

Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For disposal see section 13.

---

## 7. Handling and storage

### 7.1 Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

### 7.3 Specific end use(s)

no data available

---

## 8. Exposure controls / personal protection

### 8.1 Control parameters

Components with workplace control parameters

### 8.2 Exposure controls

#### Appropriate engineering controls

General industrial hygiene practice.

#### Personal protective equipment

##### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves must satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

##### Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts is desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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---

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|  |                   |
|--|-------------------|
| Appearance                                   | Form: solid       |
| Odour  | no data available |
| Odour Threshold                              | no data available |
| pH   | no data available |
| Melting point/freezing point                 | no data available |
| Initial boiling point and boiling range      | no data available |
| Flash Point                                  | no data available |
| Evaporation rate                             | no data available |
| Flammability                                 | no data available |
| Upper/lower flammability or explosive limits | no data available |
| Vapour pressure                              | no data available |
| Vapour density                               | no data available |
| Relative density                             | no data available |
| Water solubility                             | no data available |
| Partition coefficient: n- Octanol/Water      | no data available |
| Auto ignition temperature                    | no data available |
| Decomposition temperature                    | no data available |
| Viscosity                                    | no data available |
| Explosive properties                         | no data available |
| Oxidizing properties                         | no data available |

### 9.2 Other safety information

no data available

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## 10. Stability and reactivity

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

no data available

### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

Strong oxidizing agents, strong acids

### 10.6 Hazardous decomposition products

Other decomposition products - no data available

---

## 11. Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

no data available

#### Skin corrosion/irritation

no data available

#### Serious eye damage/eye irritation

no data available

#### Respiratory or skin sensitisation

no data available

#### Germ cell mutagenicity

no data available

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## Carcinogenicity

Carcinogenicity - rat - Implant Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Lungs, Thorax, or Respiration: Tumors. Tumorigenic: Tumors at site or application.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

## Reproductive toxicity

no data available

## Specific target organ toxicity - single exposure

no data available

## Specific target organ toxicity - repeated exposure

no data available

## Aspiration hazard

no data available

## Potential health effects

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion** May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation.

## Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## Additional Information

RTECS: TR0400000

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## 12. Ecological information

### 12.1 Toxicity

no data available

### 12.2 Persistence and degradability

no data available

### 12.3 Bioaccumulative potential

no data available

### 12.4 Mobility in soil

no data available

### 12.5 Results of PBT and vPvB assessment

no data available

### 12.6 Other adverse effects

no data available

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## 13. Disposal considerations

### 13.1 Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

#### Contaminated packaging

Dispose of as unused product.

---

## 14. Transport information

### 14.1 UN number

ADR/RID: -

IMDG: -

IATA: -

### 14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

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## 14.3 Transport hazard class(es)

ADR/RID: -                      IMDG: -                      IATA: -

## 14.4 Packaging group

ADR/RID: -                      IMDG: -                      IATA: -

## 14.5 Environmental hazards

ADR/RID: no                      IMDG Marine pollutant: no                      IATA: no

## 14.6 Special precautions for user

no data available

---

## 15. Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

no data available

### 15.2 Chemical Safety Assessment

no data available

---

## 16. Other information

### WARRANTY

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