

# SAFETY DATA SHEET

Kit PMMA low, 8 x 0.5 g, Part Number PSS-MMKITL

## Section 1. Identification

<b>Product identifier</b>	: Kit PMMA low, 8 x 0.5 g, Part Number PSS-MMKITL
<b>Part no. (chemical kit)</b>	: PSS-MMKITL
<b>Part no.</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol PSS-mm102 Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol *PSS-mm600 PSS-mm1k PSS-mm2.1k PSS-mm4.7k PSS-mm10k PSS-mm23k PSS-mm55k

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

<b>Identified uses</b>	: Reagents and Standards for Analytical Chemistry Laboratory Use
	PSS-mm102 PMMA, nominal Mw 102 g/mol, 0.5 g
	PSS-mm600 PMMA, nominal Mw 600 g/mol, 0.5 g
	PSS-mm1k PMMA, nominal Mw 1,000 g/mol, 0.5 g
	PSS-mm2.1k PMMA, nominal Mw 2,100 g/mol, 0.5 g
	PSS-mm4.7k PMMA, nominal Mw 4,700 g/mol, 0.5 g
	PSS-mm10k PMMA, nominal Mw 10,000 g/mol, 0.5 g
	PSS-mm23k PMMA, nominal Mw 23,000 g/mol, 0.5 g
	PSS-mm55k PMMA, nominal Mw 55,000 g/mol, 0.5 g

<b>Supplier/Manufacturer</b>	: Agilent Technologies, Inc. 5301 Stevens Creek Blvd Santa Clara, CA 95051, USA 800-227-9770
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<b>Emergency telephone number (with hours of operation)</b>	: CHEMTREC®: 1-800-424-9300
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<b>Note *</b>	: *PSS-mm600 PMMA, nominal Mw 600 g/mol, 0.5 g PSS-mm1k PMMA, nominal Mw 1,000 g/mol, 0.5 g PSS-mm2.1k PMMA, nominal Mw 2,100 g/mol, 0.5 g PSS-mm4.7k PMMA, nominal Mw 4,700 g/mol, 0.5 g PSS-mm10k PMMA, nominal Mw 10,000 g/mol, 0.5 g PSS-mm23k PMMA, nominal Mw 23,000 g/mol, 0.5 g PSS-mm55k PMMA, nominal Mw 55,000 g/mol, 0.5 g
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## Section 2. Hazard identification

### Classification of the substance or mixture

Poly(methyl methacrylate)  
nominal Mw: 102 g/mol  
H225


FLAMMABLE LIQUIDS - Category 2

Poly(methyl methacrylate)  
nominal Mw: 600-55000 g/mol

COMBUSTIBLE DUSTS - Category 1

## Section 2. Hazard identification

### GHS label elements

<b>Hazard pictograms</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol	
<b>Signal word</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	Danger  Warning
<b>Hazard statements</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	H225 - Highly flammable liquid and vapor.  May form combustible dust concentrations in air.
<b>Precautionary statements</b>		
<b>Prevention</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Not applicable.
<b>Response</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	Not applicable.  Not applicable.
<b>Storage</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	Not applicable.  Not applicable.
<b>Disposal</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol  Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. Not applicable.
<b>Supplemental label elements</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	None known.  Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Prevent dust accumulation.
<b>Other hazards which do not result in classification</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	None known.  None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Poly(methyl methacrylate) Substance  
 nominal Mw: 102 g/mol  
 Poly(methyl methacrylate) Substance  
 nominal Mw: 600-55000 g/mol

Ingredient name	Synonyms	% (w/w)	CAS number
<b>Poly(methyl methacrylate)</b> nominal Mw: 102 g/mol			
methyl isobutyrate	methyl isobutyrate	100	547-63-7
<b>Poly(methyl methacrylate)</b> nominal Mw: 600-55000 g/mol			
2-Propenoic acid, 2-methyl-, methyl ester, homopolymer	2-Propenoic acid, 2-methyl-, methyl ester, homopolymer	100	9011-14-7

Ranges if listed above for hazardous ingredient(s) are prescribed ranges. The actual concentration(s) or actual concentration range(s) are being withheld as a trade secret.

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.

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

## Section 4. First-aid measures

### Description of necessary first aid measures

<b>Eye contact</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol	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.
	: Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	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.
<b>Inhalation</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol	Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	: Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	Remove victim to fresh air and keep at rest in a position comfortable for breathing.
<b>Skin contact</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	: Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
<b>Ingestion</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol	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.
	: Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	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.

## Section 4. First-aid measures

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

<b>Eye contact</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	No known significant effects or critical hazards.  Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
<b>Inhalation</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	No known significant effects or critical hazards.  Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
<b>Skin contact</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	No known significant effects or critical hazards.  No known significant effects or critical hazards.
<b>Ingestion</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	No known significant effects or critical hazards.  No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

<b>Eye contact</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	No specific data.  Adverse symptoms may include the following:  irritation redness
<b>Inhalation</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	No specific data.  Adverse symptoms may include the following:  respiratory tract irritation coughing
<b>Skin contact</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	No specific data.  No specific data.
<b>Ingestion</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	No specific data.  No specific data.

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

<b>Notes to physician</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol  Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.  Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
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## Section 4. First-aid measures

<b>Specific treatments</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	No specific treatment.  No specific treatment.
<b>Protection of first-aiders</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

<b>Suitable extinguishing media</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	Use dry chemical, CO <sub>2</sub> , alcohol-resistant foam or water spray (fog). Use dry chemical, CO <sub>2</sub> , alcohol-resistant foam or water spray (fog).
<b>Unsuitable extinguishing media</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	Do not use water jet.  Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.
<b>Specific hazards arising from the chemical</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol  Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. May form explosible dust-air mixture if dispersed.
<b>Hazardous thermal decomposition products</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol  Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	Decomposition products may include the following materials: carbon dioxide carbon monoxide Decomposition products may include the following materials:  carbon dioxide carbon monoxide
<b>Special protective actions for fire-fighters</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol  Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	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. 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

## Section 5. Fire-fighting measures

### Special protective equipment for fire-fighters

: Poly(methyl methacrylate)  
nominal Mw: 102 g/mol

area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

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

Poly(methyl methacrylate)  
nominal Mw: 600-55000 g/mol

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

: Poly(methyl methacrylate)  
nominal Mw: 102 g/mol

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 spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Put on appropriate personal protective equipment.

Poly(methyl methacrylate)  
nominal Mw: 600-55000 g/mol

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 spilled 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

: Poly(methyl methacrylate)  
nominal Mw: 102 g/mol

If specialized 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".

Poly(methyl methacrylate)  
nominal Mw: 600-55000 g/mol

If specialized 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

: Poly(methyl methacrylate)  
nominal Mw: 102 g/mol

Avoid dispersal of spilled 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).

Poly(methyl methacrylate)  
nominal Mw: 600-55000 g/mol

Avoid dispersal of spilled 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 materials for containment and cleaning up

#### Methods for cleaning up

: Poly(methyl methacrylate)  
nominal Mw: 102 g/mol

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Poly(methyl methacrylate)

Move containers from spill area. Use spark-proof

## Section 6. Accidental release measures

nominal Mw: 600-55000 g/mol

tools and explosion-proof equipment. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

## Section 7. Handling and storage

### Precautions for safe handling

#### Protective measures

: Poly(methyl methacrylate)  
nominal Mw: 102 g/mol

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Poly(methyl methacrylate)  
nominal Mw: 600-55000 g/mol

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. 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. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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 grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

#### Advice on general occupational hygiene

: Poly(methyl methacrylate)  
nominal Mw: 102 g/mol

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.

Poly(methyl methacrylate)  
nominal Mw: 600-55000 g/mol

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** : Poly(methyl methacrylate) nominal Mw: 102 g/mol

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 oxidizing 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol

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 oxidizing 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

### Occupational exposure limits

Ingredient name	Exposure limits
<b>Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol</b> 2-Propenoic acid, 2-methyl-, methyl ester, homopolymer	<b>ACGIH TLV (United States).</b> Particulates Not Otherwise Specified (PNOS): 10 mg/m <sup>3</sup> Form: Inhalable Particulates Not Otherwise Specified (PNOS): 3 mg/m <sup>3</sup> Form: Respirable

### Biological exposure indices

No exposure indices known.

### Appropriate engineering controls

: Use only with adequate ventilation. 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, vapor 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



## Section 8. Exposure controls/personal protection

- 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.
- 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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- 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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- 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.
- 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** : Poly(methyl methacrylate) Liquid. [Clear.]  
nominal Mw: 102 g/mol  
Poly(methyl methacrylate) Solid. [Powder.]  
nominal Mw: 600-55000 g/mol
- Color** : Poly(methyl methacrylate) Colorless.  
nominal Mw: 102 g/mol  
Poly(methyl methacrylate) Not available.  
nominal Mw: 600-55000 g/mol
- Odor** : Poly(methyl methacrylate) Not available.  
nominal Mw: 102 g/mol  
Poly(methyl methacrylate) Not available.  
nominal Mw: 600-55000 g/mol

## Section 9. Physical and chemical properties and safety characteristics

<b>Odor threshold</b>	: Poly(methyl methacrylate)	Not available.
	nominal Mw: 102 g/mol	
	Poly(methyl methacrylate)	Not available.
	nominal Mw: 600-55000 g/mol	
<b>pH</b>	: Poly(methyl methacrylate)	Not available.
	nominal Mw: 102 g/mol	
	Poly(methyl methacrylate)	Not available.
	nominal Mw: 600-55000 g/mol	
<b>Melting point/freezing point</b>	: Poly(methyl methacrylate)	Not available.
	nominal Mw: 102 g/mol	
	Poly(methyl methacrylate)	Not available.
	nominal Mw: 600-55000 g/mol	
<b>Boiling point, initial boiling point, and boiling range</b>	: Poly(methyl methacrylate)	146.5°C (295.7°F)
	nominal Mw: 102 g/mol	
	Poly(methyl methacrylate)	Not available.
	nominal Mw: 600-55000 g/mol	
<b>Flash point</b>	: Poly(methyl methacrylate)	Closed cup: 4°C (39.2°F)
	nominal Mw: 102 g/mol	
	Poly(methyl methacrylate)	Closed cup: >250°C (>482°F)
	nominal Mw: 600-55000 g/mol	
<b>Evaporation rate</b>	: Poly(methyl methacrylate)	Not available.
	nominal Mw: 102 g/mol	
	Poly(methyl methacrylate)	Not available.
	nominal Mw: 600-55000 g/mol	
<b>Flammability</b>	: Poly(methyl methacrylate)	Not applicable.
	nominal Mw: 102 g/mol	
	Poly(methyl methacrylate)	Not available.
	nominal Mw: 600-55000 g/mol	
<b>Lower and upper explosion limit/flammability limit</b>	: Poly(methyl methacrylate)	Not available.
	nominal Mw: 102 g/mol	
	Poly(methyl methacrylate)	Not applicable.
	nominal Mw: 600-55000 g/mol	
<b>Vapor pressure</b>	: Poly(methyl methacrylate)	Not available.
	nominal Mw: 102 g/mol	
<b>Relative vapor density</b>	: Poly(methyl methacrylate)	Not available.
	nominal Mw: 102 g/mol	
	Poly(methyl methacrylate)	Not applicable.
	nominal Mw: 600-55000 g/mol	
<b>Relative density</b>	: Poly(methyl methacrylate)	Not available.
	nominal Mw: 102 g/mol	
	Poly(methyl methacrylate)	Not available.
	nominal Mw: 600-55000 g/mol	

## Section 9. Physical and chemical properties and safety characteristics

Solubility(ies)	Media	Result
	Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol water	Insoluble
Partition coefficient: n-octanol/water	Poly(methyl methacrylate) nominal Mw: 102 g/mol Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	Not available. Not available.
Auto-ignition temperature	Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	Not applicable.
Decomposition temperature	Poly(methyl methacrylate) nominal Mw: 102 g/mol Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	Not available. Not available.
Viscosity	Poly(methyl methacrylate) nominal Mw: 102 g/mol Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	Not available. Not applicable.
<u>Particle characteristics</u>		
Median particle size	Poly(methyl methacrylate) nominal Mw: 102 g/mol Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	Not applicable. Not available.

## Section 10. Stability and reactivity

Reactivity	Poly(methyl methacrylate) nominal Mw: 102 g/mol Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	Poly(methyl methacrylate) nominal Mw: 102 g/mol Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	The product is stable. The product is stable.
Possibility of hazardous reactions	Poly(methyl methacrylate) nominal Mw: 102 g/mol Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.

## Section 10. Stability and reactivity

<b>Conditions to avoid</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
	: Poly(methyl methacrylate) nominal Mw: 600-55000 g/ mol	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 grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.
<b>Incompatible materials</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol	Reactive or incompatible with the following materials:  oxidizing materials
	: Poly(methyl methacrylate) nominal Mw: 600-55000 g/ mol	Reactive or incompatible with the following materials:  oxidizing materials
<b>Hazardous decomposition products</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	: Poly(methyl methacrylate) nominal Mw: 600-55000 g/ mol	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.

#### Sensitization

Not available.

#### Mutagenicity

**Conclusion/Summary** : Not available.

#### Carcinogenicity

**Conclusion/Summary** : Not available.

#### Classification

Product/ingredient name	IARC	NTP	ACGIH
<b>Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol</b> 2-Propenoic acid, 2-methyl-, methyl ester, homopolymer	3	-	-

#### Reproductive toxicity

**Conclusion/Summary** : Not available.

#### Teratogenicity

**Conclusion/Summary** : Not available.

#### Specific target organ toxicity (single exposure)

Not available.

## Section 11. Toxicological information

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

### Information on the likely routes of exposure

: Poly(methyl methacrylate)  
nominal Mw: 102 g/mol  
Poly(methyl methacrylate)  
nominal Mw: 600-55000 g/mol

Not available.  
Not available.

### Potential acute health effects

#### Eye contact

: Poly(methyl methacrylate)  
nominal Mw: 102 g/mol  
Poly(methyl methacrylate)  
nominal Mw: 600-55000 g/mol

No known significant effects or critical hazards.  
Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

#### Inhalation

: Poly(methyl methacrylate)  
nominal Mw: 102 g/mol  
Poly(methyl methacrylate)  
nominal Mw: 600-55000 g/mol

No known significant effects or critical hazards.  
Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

#### Skin contact

: Poly(methyl methacrylate)  
nominal Mw: 102 g/mol  
Poly(methyl methacrylate)  
nominal Mw: 600-55000 g/mol

No known significant effects or critical hazards.  
No known significant effects or critical hazards.

#### Ingestion

: Poly(methyl methacrylate)  
nominal Mw: 102 g/mol  
Poly(methyl methacrylate)  
nominal Mw: 600-55000 g/mol

No known significant effects or critical hazards.  
No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

#### Eye contact

: Poly(methyl methacrylate)  
nominal Mw: 102 g/mol  
Poly(methyl methacrylate)  
nominal Mw: 600-55000 g/mol

No specific data.  
Adverse symptoms may include the following:  
irritation  
redness

#### Inhalation

: Poly(methyl methacrylate)  
nominal Mw: 102 g/mol  
Poly(methyl methacrylate)  
nominal Mw: 600-55000 g/mol

No specific data.  
Adverse symptoms may include the following:  
respiratory tract irritation  
coughing

#### Skin contact

: Poly(methyl methacrylate)  
nominal Mw: 102 g/mol  
Poly(methyl methacrylate)  
nominal Mw: 600-55000 g/mol

No specific data.  
No specific data.

## Section 11. Toxicological information

<b>Ingestion</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol	No specific data.
	Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	No specific data.

### Delayed and immediate effects and also 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

<b>General</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol	No known significant effects or critical hazards.
	Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
<b>Carcinogenicity</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol	No known significant effects or critical hazards.
	Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	No known significant effects or critical hazards.
<b>Mutagenicity</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol	No known significant effects or critical hazards.
	Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	No known significant effects or critical hazards.
<b>Reproductive toxicity</b>	: Poly(methyl methacrylate) nominal Mw: 102 g/mol	No known significant effects or critical hazards.
	Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

N/A

## Section 12. Ecological information

### Toxicity

Not available.

### Persistence and degradability

Not available.

### Bioaccumulative potential

## Section 12. Ecological information

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>Poly(methyl methacrylate)</b> <b>nominal Mw: 600-55000 g/mol</b> 2-Propenoic acid, 2-methyl-, methyl ester, homopolymer	-	<500	Low

### Mobility in soil

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

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

**TDG / IMDG / IATA** : Not regulated.

### Additional information

**Remarks** : De minimis quantities

**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

### Canadian lists

**Canadian NPRI** : None of the components are listed.

**CEPA Toxic substances** : None of the components are listed.

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol

Not listed.



## Section 15. Regulatory information

### [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](#)

- Canada** : At least one component is not listed in DSL but all such components are listed in NDSL.
- United States** : All components are active or exempted.

## Section 16. Other information

### [History](#)

**Date of issue/Date of revision** : 02/06/2024

**Date of previous issue** : 07/07/2023

**Version** : 2

- Key to abbreviations** :
- ATE = Acute Toxicity Estimate
  - BCF = Bioconcentration Factor
  - GHS = Globally Harmonized System of Classification and Labelling of Chemicals
  - HPR = Hazardous Products Regulations
  - IATA = International Air Transport Association
  - IBC = Intermediate Bulk Container
  - IMDG = International Maritime Dangerous Goods
  - LogPow = logarithm of the octanol/water partition coefficient
  - MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
  - N/A = Not available
  - UN = United Nations

### [Procedure used to derive the classification](#)

Classification	Justification
<b>Poly(methyl methacrylate) nominal Mw: 102 g/mol</b> FLAMMABLE LIQUIDS - Category 2	On basis of test data
<b>Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol</b> COMBUSTIBLE DUSTS - Category 1	On basis of test data

Indicates information that has changed from previously issued version.

### [Notice to reader](#)

**Disclaimer:** The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.

- Note \*** :
- \*PSS-mm600 PMMA, nominal Mw 600 g/mol, 0.5 g
  - PSS-mm1k PMMA, nominal Mw 1,000 g/mol, 0.5 g
  - PSS-mm2.1k PMMA, nominal Mw 2,100 g/mol, 0.5 g
  - PSS-mm4.7k PMMA, nominal Mw 4,700 g/mol, 0.5 g
  - PSS-mm10k PMMA, nominal Mw 10,000 g/mol, 0.5 g
  - PSS-mm23k PMMA, nominal Mw 23,000 g/mol, 0.5 g
  - PSS-mm55k PMMA, nominal Mw 55,000 g/mol, 0.5 g