

SAFETY DATA SHEET

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

Section 1. Identification

1.1 Product identifier

Product name	: Kit PMMA low, 8 x 0.5 g, Part Number PSS-MMKITL
Part no. (chemical kit)	: PSS-MMKITL
Part no.	: 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

Validation date : 2/6/2024

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

Identified uses	: 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

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer : Agilent Technologies, Inc.
5301 Stevens Creek Blvd
Santa Clara, CA 95051, USA
800-227-9770

1.4 Emergency telephone number

In case of emergency : CHEMTREC®: 1-800-424-9300

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

Section 2. Hazards identification

2.1 Classification of the substance or mixture

OSHA/HCS status	: Poly(methyl methacrylate) nominal Mw: 102 g/mol Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
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Classification of the substance or mixture

Date of issue : 02/06/2024

1/17

Section 2. Hazards identification

Poly(methyl methacrylate)

nominal Mw: 102 g/mol

H225

FLAMMABLE LIQUIDS - Category 2

Poly(methyl methacrylate)

nominal Mw: 600-55000 g/mol

COMBUSTIBLE DUSTS

2.2 GHS label elements

Hazard pictograms

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



Signal word

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

Hazard statements

: Poly(methyl methacrylate) nominal H225 - Highly flammable liquid and vapor.
Mw: 102 g/mol
Poly(methyl methacrylate) nominal May form combustible dust concentrations in air.
Mw: 600-55000 g/mol

Precautionary statements

Prevention

: Poly(methyl methacrylate) nominal P210 - Keep away from heat, hot surfaces, sparks,
Mw: 102 g/mol open flames and other ignition sources. No
smoking.
P241 - Use explosion-proof electrical, ventilating or
lighting equipment.
P242 - Use non-sparking tools.
P243 - Take action to prevent static discharges.
P233 - Keep container tightly closed.
Poly(methyl methacrylate) nominal Not applicable.
Mw: 600-55000 g/mol

Response

: Poly(methyl methacrylate) nominal Not applicable.
Mw: 102 g/mol
Poly(methyl methacrylate) nominal Not applicable.
Mw: 600-55000 g/mol

Storage

: Poly(methyl methacrylate) nominal P403 + P235 - Store in a well-ventilated place.
Mw: 102 g/mol Keep cool.
Poly(methyl methacrylate) nominal Not applicable.
Mw: 600-55000 g/mol

Disposal

: Poly(methyl methacrylate) nominal P501 - Dispose of contents and container in
Mw: 102 g/mol accordance with all local, regional, national and
international regulations.
Poly(methyl methacrylate) nominal Not applicable.
Mw: 600-55000 g/mol

Supplemental label elements

: Poly(methyl methacrylate) nominal None known.
Mw: 102 g/mol
Poly(methyl methacrylate) nominal Keep container tightly closed. Keep away from
Mw: 600-55000 g/mol heat, hot surfaces, sparks, open flames and other
ignition sources. No smoking. Prevent dust
accumulation.

2.3 Other hazards

Section 2. Hazards identification

Hazards not otherwise classified : Poly(methyl methacrylate) nominal None known.
Mw: 102 g/mol
Poly(methyl methacrylate) nominal None known.
Mw: 600-55000 g/mol

Section 3. Composition/information on ingredients

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

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

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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

4.1 Description of necessary first aid measures

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

Section 4. First aid measures

4.2 Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	: Poly(methyl methacrylate) nominal Mw: 102 g/mol	No known significant effects or critical hazards.
	: Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	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	No known significant effects or critical hazards.
	: Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	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	No known significant effects or critical hazards.
	: Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	No known significant effects or critical hazards.
Ingestion	: 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.

Over-exposure signs/symptoms

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

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

Notes to physician	: Poly(methyl methacrylate) nominal Mw: 102 g/mol	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	: Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: Poly(methyl methacrylate) nominal Mw: 102 g/mol	No specific treatment.
	: Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	No specific treatment.

Section 4. First aid measures

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

See toxicological information (Section 11)

Section 5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media	: Poly(methyl methacrylate) nominal Mw: 102 g/mol	Use dry chemical, CO ₂ , alcohol-resistant foam or water spray (fog).
	: Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	Use dry chemical, CO ₂ , alcohol-resistant foam or water spray (fog).
Unsuitable extinguishing media	: Poly(methyl methacrylate) nominal Mw: 102 g/mol	Do not use water jet.
	: Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.

5.2 Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	: Poly(methyl methacrylate) nominal Mw: 102 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.
	: Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	May form explosible dust-air mixture if dispersed.
Hazardous thermal decomposition products	: Poly(methyl methacrylate) nominal Mw: 102 g/mol	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	: Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol	Decomposition products may include the following materials: carbon dioxide carbon monoxide

5.3 Advice for firefighters

Special protective actions for fire-fighters	: Poly(methyl methacrylate) nominal Mw: 102 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.
	: 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.

Section 5. Fire-fighting measures

Special protective equipment for fire-fighters	: Poly(methyl methacrylate) nominal Mw: 102 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.
	: 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

6.1 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".

6.2 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).

6.3 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) nominal Mw: 600-55000 g/mol	Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or

Section 6. Accidental release measures

sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

7.1 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

7.2 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.

7.3 Specific end use(s)

Recommendations

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

Industrial applications, Professional applications.

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

Industrial applications, Professional applications.

Industrial sector specific solutions

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

Not available.

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

Not available.

Section 8. Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Poly(methyl methacrylate) nominal Mw: 102 g/mol methyl isobutyrate	None.
Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol 2-Propenoic acid, 2-methyl-, methyl ester, homopolymer	ACGIH TLV (United States). Particulates Not Otherwise Specified (PNOS): 10 mg/m ³ Form: Inhalable Particulates Not Otherwise Specified (PNOS): 3 mg/m ³ Form: Respirable OSHA PEL (United States). Particulates Not Otherwise Specified (PNOS): 5 mg/m ³ Form: Respirable fraction Particulates Not Otherwise Specified (PNOS):

Section 8. Exposure controls/personal protection

15 mg/m³ Form: Total dust

Biological exposure indices

No exposure indices known.

8.2 Exposure controls

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

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

Section 9. Physical and chemical properties and safety characteristics

Relative density : Poly(methyl methacrylate) nominal Not available.
Mw: 102 g/mol
Poly(methyl methacrylate) nominal Not available.
Mw: 600-55000 g/mol

Solubility(ies)	Media	Result
	Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol water	Insoluble

Partition coefficient: n-octanol/water : Poly(methyl methacrylate) nominal Not available.
Mw: 102 g/mol
Poly(methyl methacrylate) nominal Not available.
Mw: 600-55000 g/mol

Auto-ignition temperature : Poly(methyl methacrylate) nominal Not applicable.
Mw: 600-55000 g/mol

Decomposition temperature : Poly(methyl methacrylate) nominal Not available.
Mw: 102 g/mol
Poly(methyl methacrylate) nominal Not available.
Mw: 600-55000 g/mol

Viscosity : Poly(methyl methacrylate) nominal Not available.
Mw: 102 g/mol
Poly(methyl methacrylate) nominal Not applicable.
Mw: 600-55000 g/mol

Particle characteristics

Median particle size : Poly(methyl methacrylate) nominal Not applicable.
Mw: 102 g/mol
Poly(methyl methacrylate) nominal Not available.
Mw: 600-55000 g/mol

Section 10. Stability and reactivity

10.1 Reactivity : Poly(methyl methacrylate) nominal No specific test data related to reactivity available for this product or its ingredients.
Mw: 102 g/mol
Poly(methyl methacrylate) nominal No specific test data related to reactivity available for this product or its ingredients.
Mw: 600-55000 g/mol

10.2 Chemical stability : Poly(methyl methacrylate) nominal The product is stable.
Mw: 102 g/mol
Poly(methyl methacrylate) nominal The product is stable.
Mw: 600-55000 g/mol

10.3 Possibility of hazardous reactions : Poly(methyl methacrylate) nominal Under normal conditions of storage and use, hazardous reactions will not occur.
Mw: 102 g/mol
Poly(methyl methacrylate) nominal Under normal conditions of storage and use, hazardous reactions will not occur.
Mw: 600-55000 g/mol

10.4 Conditions to avoid : Poly(methyl methacrylate) nominal 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.
Mw: 102 g/mol

Poly(methyl methacrylate) nominal 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

Section 10. Stability and reactivity

transferring material. Prevent dust accumulation.

10.5 Incompatible materials : 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

10.6 Hazardous decomposition products : 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

11.1 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	OSHA	IARC	NTP
Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol			
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.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Section 11. Toxicological information

Information on the likely routes of exposure : Poly(methyl methacrylate) nominal Not available.
Mw: 102 g/mol
Poly(methyl methacrylate) nominal Not available.
Mw: 600-55000 g/mol

Potential acute health effects

Eye contact : Poly(methyl methacrylate) nominal No known significant effects or critical hazards.
Mw: 102 g/mol
Poly(methyl methacrylate) nominal Exposure to airborne concentrations above
Mw: 600-55000 g/mol statutory or recommended exposure limits may cause irritation of the eyes.

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

Skin contact : Poly(methyl methacrylate) nominal No known significant effects or critical hazards.
Mw: 102 g/mol
Poly(methyl methacrylate) nominal No known significant effects or critical hazards.
Mw: 600-55000 g/mol

Ingestion : Poly(methyl methacrylate) nominal No known significant effects or critical hazards.
Mw: 102 g/mol
Poly(methyl methacrylate) nominal No known significant effects or critical hazards.
Mw: 600-55000 g/mol

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Poly(methyl methacrylate) nominal No specific data.
Mw: 102 g/mol
Poly(methyl methacrylate) nominal Adverse symptoms may include the following:
Mw: 600-55000 g/mol
irritation
redness

Inhalation : Poly(methyl methacrylate) nominal No specific data.
Mw: 102 g/mol
Poly(methyl methacrylate) nominal Adverse symptoms may include the following:
Mw: 600-55000 g/mol
respiratory tract irritation
coughing

Skin contact : Poly(methyl methacrylate) nominal No specific data.
Mw: 102 g/mol
Poly(methyl methacrylate) nominal No specific data.
Mw: 600-55000 g/mol

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

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.

Section 11. Toxicological information

Potential chronic health effects

General	: 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.
Carcinogenicity	: 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.
Mutagenicity	: 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.
Reproductive toxicity	: 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

12.1 Toxicity

Not available.

12.2 Persistence and degradability

Not available.

12.3 Bioaccumulative potential

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

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

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

Section 13. Disposal considerations

13.1 Waste treatment methods

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.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Section 14. Transport information

DOT / TDG / Mexico / 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

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

U.S. Federal regulations : TSCA 8(a) CDR Exempt/Partial exemption: Not determined

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

Section 15. Regulatory information

**DEA List II Chemicals
(Essential Chemicals)** : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Poly(methyl methacrylate) nominal Mw: 102 g/mol FLAMMABLE LIQUIDS - Category 2
Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol COMBUSTIBLE DUSTS

Composition/information on ingredients

Name	%	Classification
Poly(methyl methacrylate) nominal Mw: 102 g/mol methyl isobutyrate	100	FLAMMABLE LIQUIDS - Category 2
Poly(methyl methacrylate) nominal Mw: 600-55000 g/mol 2-Propenoic acid, 2-methyl-, methyl ester, homopolymer	100	COMBUSTIBLE DUSTS

State regulations

Massachusetts : None of the components are listed.

New York : None of the components are listed.

New Jersey : None of the components are listed.

Pennsylvania : None of the components are listed.

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

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 : All components are listed or exempted.

Canada : At least one component is not listed in DSL but all such components are listed in NDSL.

China : All components are listed or exempted.

Japan : **Japan inventory (CSCL)**: All components are listed or exempted.

Japan inventory (ISHL): All components are listed or exempted.

New Zealand : All components are listed or exempted.

Section 15. Regulatory information

Philippines	: All components are listed or exempted.
Republic of Korea	: All components are listed or exempted.
Taiwan	: All components are listed or exempted.
Thailand	: Not determined.
Turkey	: All components are listed or exempted.
United States	: All components are active or exempted.
Viet Nam	: All components are listed or exempted.

Section 16. Other information

Procedure used to derive the classification

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

History

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Version : 2

Key to abbreviations

: 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
 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

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