

## Material Safety Data Sheet

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Version 1.8

Regulation (EC) No 1907/2006

## 1 - Product and Company Information

Product Name POLY(METHYL METHACRYLATE), AVERAGE M.W.  
120,000

Product Number 182230

Company Sigma-Aldrich Pte Ltd  
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Singapore 117528  
Singapore

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## 2 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT  
Not hazardous according to Directive 67/548/EEC.

## 3 - Composition/Information on Ingredients

Product Name	CAS #	EC no	Annex I Index Number	
POLY(METHYL METHACRYLATE)	9011-14-7	None	None	
Ingredient Name	Percent	CAS #	EC no	Annex I Index Number
THE FOLLOWING SUBSTANCES ARE PRESENT AS RESIDUAL COMPONENTS OF PRODUCTION.		None	None	None

TOLUENE	<= 5	108-88-3	203-625-9	601-021-00-3
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Repr. Cat.3

Symbols: F-Xn

R-Phrases: 11-38-48/20-63-65-67

Highly flammable. Irritating to skin. Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Possible risk of harm to the unborn child. Harmful: may cause lung damage if swallowed. Vapors may cause drowsiness and dizziness.

## Synonyms

Acronal S 320 D \* Acrylite \* Acryloid A-15 \*  
Acrypet \* Acrypet M 001 \* Acrypet V \* Acrypet VH  
\* Acrysol ase \* Akuripetto VH \* Altulor M 70 \* A  
21LV \* AO 10 \* Cmw bone cement \* Crinothene \*  
Degalan LP 59/03 \* Degalan S 85 \* Delpet 50M \*  
Delpet 60N \* Delpet 80N \* Diakon \* Diakon LO 951  
\* Diakon MG \* Diakon MG 101 \* Disapol M \* DV 400  
\* Elvacite \* Elvacite 2008 \* Elvacite 2009 \*  
Elvacite 2010 \* Elvacite 2021 \* Elvacite 2041 \*  
Elvacite 6011 \* Elvacite 6012 \* Kallocryl K \*  
Kallodent 222 \* Kallodent clear \* Kaneace PA 20  
\* K 120 N \* Korad \* LPT \* LPT 1 \* LSO-M \* LSO-M  
4B \* Lucite \* Lucite 30 \* Lucite 47 \* Lucite 120

\* Lucite 129 \* Lucite 130 \* Lucite 140 \* Lucite 147 \* Lucite 180 \* Metaplex NO \* Metaplex 4002T \* Methacrylic acid methyl ester polymers \* Methyl methacrylate homopolymer \* Methyl methacrylate polymer \* Methyl methacrylate resin \* 2-Methyl-2-propenoic acid methyl ester homopolymer (9CI) \* MH 101-2 \* 50N \* 50N (Polymer) \* Organic glass E 2 \* Osteobond \* Osteobond surgical bone cement \* Palacos \* Paraglas \* Parapet 60N \* Paraplex P 543 \* Paraplex P 681 \* Perspex \* PLEX 8572-F \* Plexiglas \* Plexigum M 920 \* PMMA \* PMMA-A \*

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#### 4 - First Aid Measures

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##### AFTER INHALATION

If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

##### AFTER SKIN CONTACT

In case of contact, immediately wash skin with soap and copious amounts of water.

##### AFTER EYE CONTACT

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

##### AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

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#### 5 - Fire Fighting Measures

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##### EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

##### SPECIAL RISKS

Specific Hazard(s): Emits toxic fumes under fire conditions.

##### SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

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#### 6 - Accidental Release Measures

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##### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust.

##### METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

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#### 7 - Handling and Storage

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##### HANDLING

Directions for Safe Handling: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

## STORAGE

Conditions of Storage: Keep tightly closed.

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## 8 - Exposure Controls / Personal Protection

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### ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

### GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

### PERSONAL PROTECTIVE EQUIPMENT

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

Hand Protection: Protective gloves.

Eye Protection: Chemical safety goggles.

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## 9 - Physical and Chemical Properties

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Appearance	Physical State: Solid	
	Color: White	
	Form: Crystalline	
Property	Value	At Temperature or Pressure
pH	N/A	
BP/BP Range	N/A	
MP/MP Range	N/A	
Flash Point	N/A	
Flammability	N/A	
Autoignition Temp	304 °C	
Oxidizing Properties	N/A	
Explosive Properties	N/A	
Explosion Limits	N/A	
Vapor Pressure	N/A	
SG/Density	1.188 g/cm <sup>3</sup>	
Partition Coefficient	N/A	
Viscosity	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
Evaporation Rate	N/A	
Bulk Density	N/A	
Decomposition Temp.	N/A	
Solvent Content	N/A	
Water Content	N/A	
Surface Tension	N/A	
Conductivity	N/A	
Miscellaneous Data	N/A	
Solubility	N/A	

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## 10 - Stability and Reactivity

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### STABILITY

Stable: Stable.

Materials to Avoid: Strong oxidizing agents, Strong bases.

### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

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11 - Toxicological Information

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RTECS NUMBER: TR0400000

SIGNS AND SYMPTOMS OF EXPOSURE

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

ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.  
Skin Absorption: May be harmful if absorbed through the skin.  
Eye Contact: May cause eye irritation.  
Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.  
Ingestion: May be harmful if swallowed.

TARGET ORGAN INFORMATION

Liver. Kidneys. Bladder. Brain.

CHRONIC EXPOSURE - CARCINOGEN

Result: This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

Rat

Route of Application: Implant  
Result: Tumorigenic:Tumors at site or application.  
Tumorigenic:Equivocal tumorigenic agent by RTECS criteria.

Mouse

Route of Application: Implant  
Result: Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Tumorigenic:Tumors at site or application.

Rat

Route of Application: Implant  
Result: Lungs, Thorax, or Respiration:Tumors.  
Tumorigenic:Equivocal tumorigenic agent by RTECS criteria.  
Tumorigenic:Tumors at site or application.

Mouse

Route of Application: Implant  
Result: Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Tumorigenic:Tumors at site or application.

Mouse

Route of Application: Implant  
Result: Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Tumorigenic:Tumors at site or application.

IARC CARCINOGEN LIST

Rating: Group 3

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12 - Ecological Information

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No data available.

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## 13 - Disposal Considerations

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### SUBSTANCE DISPOSAL

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

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## 14 - Transport Information

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### RID/ADR

Non-hazardous for road transport.

### IMDG

Non-hazardous for sea transport.

### IATA

Non-hazardous for air transport.

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## 15 - Regulatory Information

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### CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

S-PHRASES: 22-24/25

Do not breathe dust. Avoid contact with skin and eyes.

Not hazardous according to Directive 67/548/EEC.

Caution: Substance not yet fully tested (EU).

### COUNTRY SPECIFIC INFORMATION

#### Germany

WGK: 2

Self-Classification

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## 16 - Other Information

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### WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2007 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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