



SIGMA-ALDRICH

## Material Safety Data Sheet

Date Printed: 02/26/2007  
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Version 1.60

### Section 1 - Product and Company Information

**Product Name** Poly(methyl methacrylate)  
**Product Number** 200336  
**Brand** Aldrich Chemical  
**Company** Sigma-Aldrich  
**Street Address** 3050 Spruce Street  
**City, State, Zip, Country** SAINT LOUIS, MO 63103 US  
**Technical Phone:** 800-325-5832  
**Fax:** 800-325-5052

**Emergency Phone:** 314-776-6555

### Section 2 - Composition/Information on Ingredient

<u>Substance Name</u>	<u>CAS #</u>	<u>SARA 313</u>	<u>EC no</u>	<u>Annex I Index Number</u>
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POLY(METHYL METHACRYLATE)	9011-14-7	No		
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**Formula** (C9H14O4)<sub>n</sub>  
**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, Kallacryl 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, Pontalite, Repairsin, Resarit 4000, Rhoplex B 85, Riston, Romacryl, Shinkolite, SO 95, SO 120, SO 140, Sol, Sol 90, Sol 95, ST 1, Stellan Pink, ST 1 (Polymer), Sumipex B-LG, Sumipex B-MH, Sumipex-B MHD, Sumipex LG, Sumipex LO, Sumipex MHO, Superacryl AE, Superacryl O, Surgical simplex, Surgical simplex P, Tensol 7, Torex G, Vedril, Vedril 5, Vedril 8

### Section 3 - Hazards Identification

**HMIS Rating**  
Health: 0 Flammability: 0 Reactivity: 0

**NFPA Rating**  
Health: 0 Flammability: 0 Reactivity: 0

For additional information on toxicity, please refer to Section 11.

### Section 4 - First Aid Measures

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

#### Inhalation Exposure

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

#### Dermal Exposure

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

#### Eye Exposure

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.

### Section 5 - Fire Fighting Measures

#### Conditions of Flammability

Under fire conditions, material may decompose to form flammable and/or explosive mixtures in air.

**Autoignition Temp:** 304 °C

#### Extinguishing Media

##### Suitable

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

#### Firefighting

##### Protective Equipment

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

##### Specific Hazard(s)

Emits toxic fumes under fire conditions.

### Section 6 - Accidental Release Measures

#### 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.

### Section 7 - Handling and Storage

#### Handling

##### User Exposure

Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

#### Storage

##### Suitable

Keep tightly closed.

### Section 8 - Exposure Controls / PPE

#### Engineering Controls

Safety shower and eye bath. Mechanical exhaust required.

#### Personal Protective Equipment

##### Respiratory

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

Protective gloves.

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**Eye**

Chemical safety goggles.

**General Hygiene Measures**

Wash thoroughly after handling.

**Section 9 - Physical/Chemical Properties****Appearance****Physical State**

Solid

**Molecular Weight:** N/A**pH** N/A**BP/BP Range** N/A**MP/MP Range** N/A**Freezing Point** N/A**Vapor Pressure** N/A**Vapor Density** N/A**Saturated Vapor Conc.** N/A**SG/Density** N/A**Bulk Density** N/A**Odor Threshold** N/A**Volatile%** N/A**VOC Content** N/A**Water Content** N/A**Solvent Content** N/A**Evaporation Rate** N/A**Viscosity** N/A**Partition Coefficient** N/A**Decomposition Temp.** N/A**Flash Point °F** N/A**Flash Point °C** N/A**Explosion Limits** N/A**Flammability** N/A**Autoignition Temp** 304 °C**Solubility** N/A

N/A = not available

**Section 10 - Stability and Reactivity****Stability**

Stable

Stable.

**Materials to Avoid**

Strong oxidizing agents, Strong acids.

**Hazardous Decomposition Products****Hazardous Decomposition Products**

Carbon monoxide, Carbon dioxide.

**Hazardous Polymerization****Hazardous Polymerization**

Will not occur.

**Section 11 - Toxicological Information****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.

**Signs and Symptoms of Exposure**

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

**RTECS Number:** TR0400000**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 - Implant:** 127 MG/KG

Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Tumorigenic: Tumors at site or application.

**Mouse - Implant:** 800 MG/KG

Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Tumorigenic: Tumors at site or application.

**Rat - Implant:** 1882 MG/KG

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

**Mouse - Implant:** 13 GM/KG

Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Tumorigenic: Tumors at site or application.

**Mouse - Implant:** 1280 MG/KG

Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Tumorigenic: Tumors at site or application.

**IARC Carcinogen List****Rating**

Group 3

**Section 12 - Ecological Information**

No data available.

**Section 13 - Disposal Considerations****Appropriate Method of Disposal of Substance or Preparation**

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.

**Section 14 - Transport Information****DOT****Proper Shipping Name:** None**Non-Hazardous for Transport:** This substance is considered to be non-hazardous for transport.

**IATA**

**Non-Hazardous for Air Transport:** Non-hazardous for air transport.

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**Section 15 - Regulatory Information**

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**United States Regulatory Information**

**SARA Listed:** No

**TSCA Inventory Item:** Yes

**Canada Regulatory Information****WHMIS Classification**

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

**DSL:** Yes

**NDSL:** No

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**Section 16 - Other Information**

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**Disclaimer**

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

**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.