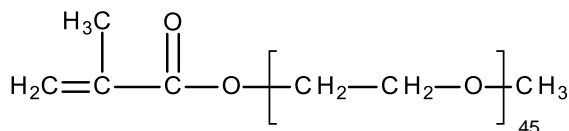


# Methyl Polyethyleneglycol Methacrylate 2000 (MPEGMA 2000)

Methacrylic acid ester, for manufacturing polymers and for use as a feed stock for syntheses



CAS No.: 26915-72-0

EINECS No.: exempt

**Molecular formula**

C<sub>95</sub>H<sub>188</sub>O<sub>47</sub>

Molar mass: ~2070 kg/kmol

**Product specification**

Water content (ASTM E 203)	50 ± 2 %
Acid value (ISO 660, calc. as methacrylic acid)	max. 40 mg/g KOH
Color on dispatch (Gardener)	max. 3
Degree of conversion (NMR/saponification value)	min. 95 %
Standard stabilization (HPLC)	200 ± 20 ppm MEHQ

The aforementioned data shall constitute the agreed contractual quality of the product at the time of passing of risk. The data are controlled at regular intervals as part of our quality assurance program. Neither these data nor the properties of product specimens shall imply any legally binding guarantee of certain properties or of fitness for a specific purpose. No liability of ours can be derived therefrom.

**Other properties**

Appearance & Physical form	clear, colorless liquid
Stabilization (Topanol A, HPLC)	< 150 ppm
Stabilization (BHT, HPLC)	< 300 ppm
Density (at 20 °C)	1.08 g/cm <sup>3</sup>
Melting point	-14.9 °C
Boiling point	100 °C (1013 mbar, water)
pH	2 – 5

**Labelling according to local Directives**

see SDS

## Applications

Methyl Polyethyleneglycol Methacrylate 2000 (MPEGMA 2000) forms homopolymers and copolymers. Copolymers of Methyl Polyethyleneglycol Methacrylate 2000 (MPEGMA 2000) can be prepared with (meth)acrylic acid and its salts, amides and esters, and with methacrylates, acrylonitrile, maleic acid esters, vinyl acetate, vinyl chloride, vinylidene chloride, styrene, butadiene, unsaturated polyesters and drying oils, etc.

Methyl Polyethyleneglycol Methacrylate 2000 (MPEGMA 2000) is also a very useful feedstock for chemical syntheses, because it readily undergoes addition reactions with a wide variety of organic and inorganic compounds.

## Features & Benefits

Methyl Polyethyleneglycol Methacrylate 2000 (MPEGMA 2000) can be used to impart the following properties to polymers:

- Hydrophilicity
- Flexibility
- Rheology modification
- Dispersibility
- Low shrinkage

## Storage & Handling

In order to prevent polymerization Methyl Polyethyleneglycol Methacrylate 2000 (MPEGMA 2000) must always be stored under air, and never under inert gases. The presence of oxygen is required for the stabilizer to function effectively.

Freezing of Methyl Polyethyleneglycol Methacrylate 2000 (MPEGMA 2000) results in segregation of monomer and inhibitor. In addition it is especially important to replenish dissolved oxygen after melting the drummed material prior to use. Replenishment dissolved oxygen and mixing of MEHQ into the monomer can be done using a palette shaker or a drum tumbler.

The melting process requires temperatures of 20 °C or higher but at a maximum of 35 °C as the heating temperature. Warming the product in a room of 20 – 25 °C over several days is the preferred option. As an alternative if faster melting is required heating cabinets using hot water or hot oil are the preferred apparatus for the thawing process of Methyl Polyethyleneglycol Methacrylate 2000 (MPEGMA 2000) since this avoids hot spots. Local hot spots of more than 35 °C may result in premature aging of material. Product temperatures of more than 45 °C may result in a polymerization of the monomer.

During storage as a molten liquid it is advisable to replenish the dissolved oxygen content on a weekly basis. Methyl Polyethyleneglycol Methacrylate 2000 (MPEGMA 2000) has to contain a stabilizer and the storage temperature must not exceed 20 °C to prevent premature quality degradation. If the above mentioned conditions are met a storage stability Methyl Polyethyleneglycol Methacrylate 2000 (MPEGMA 2000) of 6 months can be expected upon delivery.

## Safety

A Safety Data Sheet has been compiled for Methyl Polyethyleneglycol Methacrylate 2000 (MPEGMA 2000) that contains up-to-date information on questions relevant to safety.

## Note

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed.

June 2019