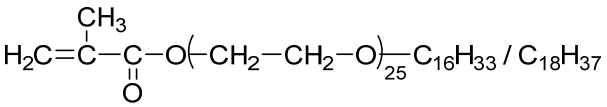
Stearyl Polyethyleneglycol Methacrylate 1100 (SPEGMA 1100)

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



CAS No.: 70879-51-5

Molar mass:
1411.9 kg/kmol
1439.9 kg/kmol

Molecular formula

$C_{70}H_{138}O_{27}$ / $C_{72}H_{142}O_{27}$

Product specification

Assay (NMR)	60 ± 3 %
Water content (ASTM E 203)	20 ± 3 %
Acid content (calc. as methacrylic acid) (ASTM D 1613)	20 ± 3 %
Color on dispatch (APHA, ASTM D 1209)	max. 100
Standard stabilization (HPLC)	250 ± 50 ppm BHT 40 ± 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)	<200 ppm
Density at 20 °C	1.05 g/cm^3
Melting point	0.9 °C
pH	3 – 4.5

Labelling according to local Directives

see SDS

Applications

Stearyl Polyethyleneglycol Methacrylate 1100 (SPEGMA 1100) forms homopolymers and copolymers. Copolymers of Stearyl Polyethyleneglycol Methacrylate 1100 (SPEGMA 1100) can be prepared with (meth)acrylic acid and its salts, amides and esters, and with (meth)acrylates, acrylonitrile, maleic acid esters, vinyl acetate, vinyl chloride, vinylidene chloride, styrene, butadiene, unsaturated polyesters and drying oils, etc.

Stearyl Polyethyleneglycol Methacrylate 1100 (SPEGMA 1100) 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

Stearyl Polyethyleneglycol Methacrylate 1100 (SPEGMA 1100) can be used to impart the following properties to polymers:

- Hydrophobicity / Hydrophilicity
- Rheology modification
- Dispersant

Storage & Handling

In order to prevent polymerization Stearyl Polyethyleneglycol Methacrylate 1100 (SPEGMA 1100) 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 Stearyl Polyethyleneglycol Methacrylate 1100 (SPEGMA 1100) 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 preffered option. As an alternative if faster mleting is required heating cabinets using hot water or hot oil are the preferred apparatus for thawing process of Stearyl Polyethyleneglycol Methacrylate 1100 (SPEGMA 1100) 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. Stearyl Polyethyleneglycol Methacrylate 1100 (SPEGMA 1100) 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 Stearyl Polyethyleneglycol Methacrylate 1100 (SPEGMA 1100) of 6 months can be expected upon delivery.

Safety

A Safety Data Sheet has been compiled for Stearyl Polyethyleneglycol Methacrylate 1100 (SPEGMA 1100) 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.

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