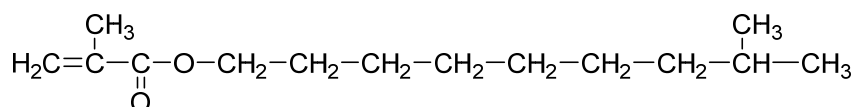


iso-Decyl Methacrylate (IDMA)

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



CAS No.: 29964-84-9
EINECS No.: 249-978-2

Molecular formula

C₁₄H₂₆O₂

Molar mass: 226.4 kg/kmol

Product specification

Assay (Gas chromatography)	min. 98.0 %
Water content (ASTM E 203)	max. 0.2 %
Acid content (calc. as methacrylic acid) (ASTM D 1613)	max. 0.05 %
Color on dispatch (APHA, ASTM D 1209)	max. 50
Standard stabilization (HPLC)	175 ± 25 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	clear, pale yellow
Physical form	liquid
Odor	ester-like
Density at 20 °C	0.882 g/cm ³
Boiling point	263 °C
Melting point	- 116 °C
Flash point	100 °C
Viscosity, dynamic at 20 °C	3.14 mPa · s
Vapor pressure at 25 °C	0.0156 mbar

Labelling according to local Directives

see SDS

Applications

iso-Decyl Methacrylate (IDMA) forms homopolymers and copolymers. Copolymers of iso-Decyl Methacrylate (IDMA) can be prepared with (meth)acrylic acid and its salts, amides and esters, and with (meth)acrylates, acrylonitrile, maleic acid esters, vinyl chloride, vinylidene chloride, styrene, butadiene, unsaturated polyesters and drying oils, etc. iso-Decyl Methacrylate (IDMA) is also a very useful feedstock for chemical syntheses, because it readily undergoes addition reactions with a wide variety of organic and inorganic compounds.

iso-Decyl Methacrylate (IDMA) is a useful monomer in applications such as anaerobic adhesives, vacuum impregnation sealants, high solids acrylic polyols for automotive coatings. It offers a low viscosity and low odor combined with low shrinkage on polymerization.

Features & Benefits

iso-Decyl Methacrylate (IDMA) is a hydrophobic, mono functional Methacrylate monomer with a low glass transition temperature (T_g) and hence is excellent as a flexible and plasticizing monomer. iso-Decyl Methacrylate (IDMA) can be used to impart the following properties to polymers:

- Chemical/water resistance
- Impact strength
- Hydrophobicity
- Low shrinkage
- Adhesion
- Weatherability

Storage & Handling

In order to prevent polymerization, iso-Decyl Methacrylate (IDMA) must always be stored under air, and never under inert gases. The presence of oxygen is required for the stabilizer to function effectively. It has to contain a stabilizer and the storage temperature must not exceed 35 °C. Under these conditions, a storage stability of one year can be expected upon delivery. In order to minimize the likelihood of overstorage, the storage procedure should strictly follow the "first-in-first-out" principle. For extended storage periods over 4 weeks it is advisable to replenish the dissolved oxygen content.

Storage tanks and pipes should be made out of stainless steel or aluminium. Storage tanks, pumps and pipes should be earthed.

Safety

A Safety Data Sheet has been compiled for iso-Decyl Methacrylate (IDMA) 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.

September 2016