Lauryl Acrylate 1214
(LA 1214)

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

\[
\text{H}_2\text{C}=\text{CH}-\text{C}=\text{O}-\text{C}_{12}\text{H}_{25}/\text{C}_{14}\text{H}_{29} \\
\text{O}
\]

CAS No.: 2156-97-0 (C_{12})
21643-42-5 (C_{14})

EINECS No.: 218-463-4 (C_{12})
244-491-1 (C_{14})

Molecular formula

\[
\begin{align*}
\text{C}_{12}\text{H}_{26}\text{O}_2  & \quad \text{Molar mass: } 240.4\ \text{kg/kmol (C}_{12}) \\
\text{C}_{14}\text{H}_{28}\text{O}_2  & \quad \text{Molar mass: } 268.4\ \text{kg/kmol (C}_{14})
\end{align*}
\]

Product specification

- Assay (Gas chromatography) min. 95.0 %
- Water content (ASTM E 203) max. 0.1 %
- Acid content (calc. as acrylic acid) (ASTM D 1613) max. 0.1 %
- Color on dispatch (APHA, ASTM D 1209) max. 150
- Standard stabilization (ASTM D 3125) 200 ± 50 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, colourless liquid
- Odor: Resembles parafin
- Density at 25 °C: 0.87 g/cm³
- Melting point: -14 to 2 °C
- Boiling point: Approx. 120 °C
- Viscosity: 5.14 mPa · s
- Vapor pressure at 20 °C: 0.000067 hPa

Labelling according to local Directives

see SDS
Applications
Lauryl Acrylate 1214 (LA 1214) forms homopolymers and copolymers. Copolymers of Lauryl Acrylate 1214 (LA 1214) 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. Lauryl Acrylate 1214 (LA 1214) 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
Lauryl Acrylate 1214 (LA 1214) is a low viscosity, low toxicity monomer with a long pendant aliphatic chain and the high reactivity of acrylates. Lauryl Acrylate 1214 (LA 1214) can be used to impart the following properties to polymers:
- Chemical stability
- Hydrophobicity
- Abrasion resistance
- Flexibility
- Impact strength
- Low shrinkage
- Weatherability
- Rheology modifier

Storage & Handling
In order to prevent polymerization, Lauryl Acrylate 1214 (LA 1214) 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.

Safety
A Safety Data Sheet has been compiled for Lauryl Acrylate 1214 (LA 1214) 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 2016