Industrial Coatings

Technical Data Sheet

Laromer® LR 8887

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Product Description

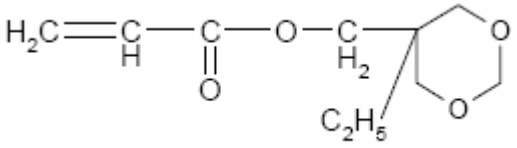
Laromer® LR 8887 is a mono-functional acrylic acid ester that is used as a reactive diluent for the formulation of energy curable coatings for wood, cork, and plastic applications.

Key Features & Benefits

- Very good reactivity
- Moderate diluent
- Good flexibility
- Low shrinkage

Chemical Structure

Trimethylolpropane formal acrylate



Properties

Typical Properties

Appearance	clear liquid
Assay (gas chromatography)	≥ 78%
Acidity, as acrylic acid (DIN EN ISO 2114, method B)	≤ 0.05%
Water content (K. Fischer, DIN 51777)	≤ 0.1%
Iodine color number (DIN 6162)	≤ 5
Density at 25°C	1.1 g/cm³
Standard stabilization	900 – 1,100 ppm MEHQ[1]

Solubility, diluent tolerance

Soluble in all solvents common to the coatings industry with the exception of aliphatic hydrocarbons.

Compatibility

Can be homogenously mixed with most unsaturated acrylic resins such as other Laromer® grades.

[1] monomethyl ether of hydroquinone
These typical values should not be interpreted as specifications.

Applications

General

Laromer® LR 8887 is a mono-functional reactive diluent used for the formulation of UV and EB curable coatings for wood, cork, and plastic applications.

Because of its elasticizing effect, Laromer® LR 8887 is preferably used to formulate coatings that are applied to flexible substrates. Its good resistance properties and high toughness also make it suitable for parquet varnishes.

Cured coatings based on Laromer® LR 8887 have much lower odor levels compared with those based on other acrylic monomers.

Laromer® LR 8887 is recommended for applications such as:

- Interior/exterior wood coatings for floor, furniture, or millwork applications

Processing

Laromer® LR 8887 must be combined with other acrylic resins, since it acts as a reactive diluent. The properties of the finished coating can be controlled by combining it with acrylic resins, such as epoxy acrylates, polyester acrylates, or urethane acrylates.

A suitable photoinitiator must be added to the combination of binder and Laromer® LR 8887 to permit curing by UV energy. The photoinitiator types include, for example, α-hydroxy ketones, benzophenones, acyl phosphine oxides, and blends thereof, for typical coating applications. The amount of photoinitiator varies between 2 - 5% based on Laromer® LR 8887 as delivered.

To increase the reactivity particularly of thin coats, a tertiary amine such as methyl diethanolamine or a reactive tertiary amine can be added. Care must be taken to ensure that the amine does not react with the substrate, particularly pale colored ones.

When using an amine-modified binder such as Laromer® PO 77 F, no tertiary amine co-initiator is necessary.

Please contact the local BASF technical specialist for further details.

Safety

General

The usual safety precautions when handling chemicals must be observed. These include the measures described in Federal, State, and Local health and safety regulations, thorough ventilation of the workplace, good skin care, and wearing of protective goggles.

Safety Data Sheet

All safety information is provided in the Safety Data Sheet for Laromer® LR 8887.

Important

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