

Laromer® UP 35 D

Product description

Unsaturated polyester resin for the formulation of radiation-curable putties, primers and topcoats for different substrates. Diluted with 45 % dipropyleneglycol diacrylate (DPGDA)

Key benefits

- Excellent cost-performance-ratio
- Good leveling and adhesion on many substrates
- Good sanding properties

Chemical nature

Unsaturated polyester diluted with 45 % dipropyleneglycol diacrylate (DPGDA)

Properties

Physical form

Clear, slightly yellowish and medium-viscousliquid

Technical data

(no supply specification)

Viscosity at 23 °C (D = 100 ⁻¹)	DIN EN ISO 3219	3000 - 6000 mPa⋅s
Acid value	DIN EN ISO 2114	≤ 35 mg KOH/g
Jodine colour number	DIN EN 1557	≤5
Flash point		> 100 °C
Density at 20 °C		~1,1 g/cm³

Application

Laromer[®] UP 35 D is soluble in most of the common solvents used in the coatings industry (e.g. butyl acetate). For processing, it can be further diluted with monomers such as GPTA (propoxylated glycerol triacrylate), TMPTA (trimethylolpropane triacrylate) or DPGDA (dipropyleneglycol diacrylate) as well as with esters, ketones or aromatic hydrocarbons.

Laromer[®] UP 35 D is a medium-reactive, unsaturated polyester resin preferably used in UV-coatings and -composites. After curing, coats are easy to sand with a balanced mechanical profil. Translucent extenders such as barium sulfate, talcum, kaolin or colloidal silica can be used in the manufacture of surfacers.

Laromer[®] UP 35 D can be further diluted with low-volatile monomers such as mono-, di- or trifunctional acrylates. These are incorporated into the film during curing and influence its properties. Monofunctional acrylates increase film flexibility. Difunctional acrylates have little influence on film hardness and flexibility while tri-functional acrylates increase film hardness.

With an adequate flash-off zone available, inert solvents may also be used. These must, however, be completely removed from the film prior to radiation curing.

Formulation guideline

It is homogenously miscible with most unsaturated acrylic resins, e. g., other Laromer® grades.

A photo initiator must be added to allow curing by ultraviolet radiation. Suitable initiators are α -hydroxy ketone, benzophenone. Best results for white-pigmented coatings are obtained using Acylphosphine oxides.

A tertiary amine should not be used as a co-initiator. The high acid value of Laromer® UP 35 D could lead to haze and other effects caused by incompatibility

Storage

Product ought to be kept within sealed unopened containers. Containers should be stored below 35 °C and away from sunlight.

Safety

When handling this product, please comply with the advice and information given in the safety data sheet and observe protective and workplace hygiene measures adequate for handling chemicals.

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. The agreed contractual quality of the product specification. It is the responsibility of the recipient of our product to ensure that any proprietary rights and existing laws and legislation are observed.