

# Laromer® PO 8996

## General

Laromer® PO 8996 is a modified polyether acrylate for the formulation of radiation curable coatings and printing inks for wood, wood-based products, paper and plastics.

## Key features & benefits

moderate curing speed

low viscosity

good thinning properties in emission free UV curable spray coatings

## Chemical nature

amine modified polyether acrylate

## Properties

### Appearance

clear, low viscous liquid

### Typical characteristics

*(should not be interpreted as specifications)*

viscosity at 23°C	50~90 mPa·s
acid value	≤ 0.5 mg KOH/g solids
iodine color number	≤ 2
density at 20°C	1.1 g/mL
flash point	> 100°C

## Application

Laromer® PO 8996 is a multifunctional, polymeric amine modified polyether acrylate generally employed to boost the reactivity of both UV/EB inks and UV/EB overprint varnishes in graphic arts and of pigmented and non-pigmented UV/EB lacquers in wood coatings.

Laromer® PO 8996 is fully compatible with all common monomers and with all common oligomers like epoxy, polyester and urethane acrylates. It is soluble in many organic solvents like esters, ketones and aromatic hydrocarbons as used in UV spray coating applications for example.

Laromer® PO 8996 provides superior film forming properties leading to flexible coatings after UV/EB curing. In internal comparison (amine-modified polyether acrylate range) the Laromer® PO 8996 shows high reactivity at low viscosity and flexibility of the formed film.

Laromer® PO 8996 is an excellent choice as binder for radiation curable spray coats, where fast curing speed, high gloss and low yellowing are required. Due to its low viscosity it could be used as thinner in combination with other amine modified, or unmodified resins and/or solvents for spray- and curtain coating applications.

A suitable photoinitiator must be used to photocure Laromer® PO 8996. The photoinitiator types include, for example,  $\alpha$ -hydroxy ketone, benzophenone, acyl phosphine oxide, and blends thereof, for typical coating applications. The amount of photoinitiator varies between 2%~5 % based on Laromer® PO 8996 as delivered. Acyl phosphine oxide types (MAPO, MAPO-Liquid and BAPO) of photoinitiators are recommended for film thicknesses of 50 g/cm<sup>2</sup> to ensure through curing.

For further acceleration of curing speed, we recommend the use of amine synergists such as Laromer® PO 9103, Laromer® PO 9104 or Laromer® PO 9106. Migration of amine synergists to the surface - ("blooming" effect) - is not possible, since the amine functionality is covalently bound to the UV cured resin network after curing process.

## Storage

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

For further detailed application information please contact our Technical Support Department.

### 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 results exclusively from the statements made in 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.

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