

Laromer[®] PO 9139

Product description	Laromer [®] PO 9139 is a polymeric, medium viscosity amine modified polyether acrylate employed for boosting reactivity as co-binder or as sole binder in all types of radiation curable inks and coatings used in graphic arts, wood coatings, flooring and industrial coatings on substrates like paper, board, wood (materials), metal and plastics.
Key benefits	<ul style="list-style-type: none"> ■ Outstanding reactivity ■ Excellent film forming properties ■ Balanced mechanical properties
Chemical nature	Amine modified polyether acrylate

Properties

Physical form Slightly hazy, medium viscous liquid

Technical data (no supply specification)	Viscosity at 25 °C	method derived from DIN EN ISO 2555	2000 - 6000 mPa·s
	Gardner colour value	DIN EN ISO 4630	≤ 3
	Density at 20.0°C		~ 1.15 g/cm ³
	Refractive index n _D at 20 °C		1.4830
	Surface tension at 23 °C		41 mN/m

Application

Laromer® PO 9139 is a polymeric, medium viscosity amine modified polyether acrylate employed for boosting reactivity as co-binder or as sole binder in all types of radiation curable inks and coatings used in graphic arts, wood coatings, flooring and industrial coatings on substrates like paper, board, wood (materials), metal and plastics.

Laromer® PO 9139 is fully compatible with all mono- to multifunctional monomers. Blending with monofunctional monomers increase the flexibility of UV/EB cured films while blending with difunctional ones has no significant impact on flexibility and hardness, whereas blending with trifunctional and higher functional ones particularly increase the film hardness. The product has good compatibility with common oligomers such as epoxy-, polyester- and urethane-acrylates as well as with most organic solvents such as alcohols, ethers, acetates and ketones.

Formulation guideline

As a result of its amine modification Laromer® PO 9139 imparts very high reactivity to all radiation curable formulations when combined with H-abstracting type II photoinitiators. It also considerably enhances the reactivity of type I photoinitiators, reducing oxygen inhibition in surface cure to a great extent, particularly for thin films.

Laromer® PO 9139 also speeds up surface cure considerably in UV LED applications in combination with acylphosphine oxide photoinitiators.

A substantial improvement in reactivity can be reached in UV overprint varnish formulations at levels above 10 wt%. In those applications where bisphenol A free formulas are required as for example in UV/EB food packaging Laromer® PO 9139 can be used as sole binder meeting also the highest industry standards in terms of low migration performance.

Further key applications are UV flexo inks and pigmented coatings. When formulating with Laromer® PO 9139 it is recommended to add the Laromer® PO 9139 in the let-down stage, due to its high reactivity.

Storage

Product ought to be kept within sealed unopened containers. Containers should be stored below 30 °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 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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