

# Laromer® PE 55 F

**Product description** 

Polyester acrylate, free of diluents for the formulation of radiation curable coatings and printing inks for wood, wood-based products, paper and plastics.

Key benefits

- Free of reactive diluents
- Balanced properties
- Good toughness

**Chemical nature** 

Polyester acrylate

Flash point

## **Properties**

Physical form Viscous liquid

**Technical data** 

(not supply specification)

Viscosity at 23 °C, D = 25 s-1	DIN EN 12092	25 – 45 Pa·s
Acid number	DIN EN ISO 2114	≤ 5 mg KOH/g
Color (iodine number)	DIN EN 1557	≤ 10
Density		~ 1.17 g/cm3

> 115 °C

### **Application**

Due to the balanced properties of Laromer® PE 55 F the binder is used in a wide field of applications.

Laromer<sup>®</sup> PE 55 F leads to films with good toughness and overall properties thus it is used for the formulation of primers, sealers and topcoats for furniture and flooring applications, mainly.

The resin can be diluted for processing with low volatile monomers such as monofunctional, difunctional and trifunctional acrylates or with low viscous polyether acrylates such as Laromer<sup>®</sup> LR 8863, Laromer<sup>®</sup> PO 33 F, Laromer<sup>®</sup> PO 43 F or Laromer<sup>®</sup> PO 8967.

Co-polymerizable reactive diluents will influence the coating properties depending on their chemical nature and concentration in the formulation.

Inert, volatile solvents such as ketones or esters can be used to reduce the viscosity of the formulation based on Laromer® PE 55 F. In this case, the solvent must be flashed of sufficiently prior to UV / EB curing.

A suitable photoinitiator must be used to photocure Laromer® PE 55 F. 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® PE 55 F as delivered.

Acyl phosphine oxide types (MAPO, MAPO-Liquid and BAPO) of photoinitiators are recommended for film thicknesses of 50 g/cm² and more to ensure through curing.

#### **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 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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