

# Printing & Packaging Industrial Coatings

Technical Data Sheet

## Laromer® PPTTA



### Product Description

Laromer PPTTA is a tetrafunctional polyether acrylate reactive diluent for the formulation of energy curable inks and coatings for low migration applications on a variety of substrates.

### Chemical Composition

Ethoxylated (5.0) pentaerythritol tetraacrylate

### Key Features & Benefits

- Dual-cure applications
- Pigment coating
- Excellent weather and scratch resistance
- Can be used as a sole binder
- Improves adhesion

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## Properties

### Typical Properties

Appearance	clear, low viscous liquid
Viscosity at 23°C (DIN EN ISO 3219)	~ 190 cps
Acid Value	~ 0.7 mg KOH/g
Apha colour number	~ 100
Density at 20°C	~ 1.1514 g/cm <sup>3</sup>
Functionality (theoretical)	4.0
Surface Tension at 20°C	40 mN/m
Refractive index $n_D$ at 20°C	1.4780

These typical values should not be interpreted as specifications.

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## Applications

Laromer® PPTTA is a low viscous tetrafunctional polyether acrylate serving as reactive diluent for oligomers such as epoxy acrylates, polyester acrylates and urethane acrylates. It features high cure speed in all kinds of UV/EB applications and results in hard, but still flexible films due to its fairly low shrinkage compared with other tetrafunctional monomers.

Laromer® PPTTA is a key monomer in all types of low migration formulas for UV/EB overprint varnishes as well as for UV/EB offset and flexo inks due to its high reactivity and high molecular weight. It also provides low odour and excellent solvent resistance.

Typical other application areas of Laromer® PPTTA are as universal thinner for pigmented and non-pigmented UV/EB coatings applied on different substrates.

## 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® PPTTA.

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