

# Efka<sup>®</sup> PU 4047

## general

high-molecular-weight dispersing agent

Efka<sup>®</sup> PU 4047 is a polymeric dispersant for stabilizing inorganic and organic pigments. This results in:

- improved gloss and DOI
- reduced flooding
- higher color strength
- lower viscosity

The higher molecular weight of Efka<sup>®</sup> PU 4047 compared to Efka<sup>®</sup> PU 4046 gives stronger deflocculation results with some organic pigments and carbon blacks. In spite of its higher molecular weight, Efka<sup>®</sup> PU 4047 has a wide compatibility with all kinds of resins. Pigment concentrates based on Efka<sup>®</sup> PU 4047 show lower viscosity than concentrates made with any other Efka<sup>®</sup> polymeric dispersants and can even be used in pure let downs based on white spirit.

## chemical nature

modified polyurethane

## Properties

### physical form

clear, slightly yellowish liquid

### storage

Efka<sup>®</sup> PU 4047 may partially solidify when stored below 10 °C (50 °F). Heat to 35–40 °C (95–104 °F) to reliquify.

### typical properties (no supply specification)

solvent	n-butyl acetate / methoxypropyl acetate / 2-butanol
density at 20 °C (68 °F)	~ 0.98 g/cm <sup>3</sup>
active ingredients	~ 35 %
flash point	24 °C (75°F)
color	≤ 4

## Application

Efka<sup>®</sup> PU 4047 is used in high-quality industrial coatings such as automotive topcoats (OEM and refinish), coil coatings and 2-pack polyurethane coating systems as well as pigment concentrates (see our concept for resin-containing pigment concentrates [RCPC] based on Efka<sup>®</sup> polymeric dispersants).

**recommended concentrations**

Calculation method for the required amount of active ingredient on pigment:

inorganic pigments	10 % of oil absorption value
organic pigments	25–50 % of BET value
carbon blacks	20 % of DBP absorption value

Efka® PU 4047 should be incorporated in the mill base before adding the pigments.

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**Validity**

This Technical Data Sheet is valid for all versions of the Efka® PU 4047.

**Safety**

When handling these products, 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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