

Efka[®] PX 4700

(old : Efka[®] 7700)

general

high-molecular-weight dispersant

Efka[®] PX 4700 is a solvent-based dispersant of the acrylic block copolymer family of products made by Controlled Free Radical Polymerization (CFRP, this technology allows to produce polymeric dispersants with defined polymer architecture and low poly-dispersity) and is especially suited for the dispersion of pigments into resin-minimal and resin-free pigment concentrates for use in solvent-based inkjet inks.

Efka[®] PX 4700 offers high efficiency in dispersing and stabilizing high-performance pigments providing an excellent combination of viscosity suppression and storage stability. This makes Efka[®] PX 4700 ideally suited for the development of inkjet inks for wide-format industrial printing applications.

chemical nature

acrylic block copolymer

Properties

physical form

amber to brownish liquid

shelf life

Efka[®] PX 4700 should be stored in a cool dry place. When kept in original unopened containers, it will keep up to 4 years from the date of manufacture.

typical properties (no supply specification)

active ingredients	~ 80 %
solvent	methoxypropyl acetate
amine value	~ 59 mg KOH/g

Application

Efka[®] PX 4700 is ideally suited for the production of resin-minimal or resin-free concentrates/bases of organic pigments. As such it is especially suitable for use in solvent-based inkjet inks.

It allows stabilizing organic pigments in very-low-viscosity/high-solvent systems. It is suitable for use with strong solvent systems (e.g., ketones, esters) and mild solvent systems (e.g., glycol ethers).

Efka[®] PX 4700 is suitable for use with a wide range of organic pigments, particularly (but not exclusively):

- quinacridone magentas
- benzimidazolone and nickel azo yellows
- carbon blacks

recommended concentrations

Efka® PX 4700 should be incorporated into the solvent/resin blend before addition of pigments into the mill base. Appropriate use levels depend strongly on pigment selection, dispersion methodology and the final properties required. For optimum results, a ladder study should be performed in the chosen formulation.

Maximum viscosity suppression is generally achieved at use levels of 20–70 % active dispersant polymer versus pigment load. Storage stability is best developed at higher use levels in the range of 40–90 % active dispersant polymer versus pigment load.

The ideal compromise of these properties will usually be found in range of 40–70 % active dispersant polymer versus pigment load. This corresponds to a use level range of 50–90 % Efka® PX 4700 as supplied, calculated versus pigment load.

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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