Efka® PX 4705

Product description

High-molecular weight dispersing agent

Efka® PX 4705 is made with Controlled Free Radical Polymerization (CFRP) technology, which allows producing polymeric dispersants with defined polymer architecture and a low poly-dispersity index.

Efka® PX 4705 is especially suitable for stabilizing pigments in radiation curing systems and solvent-based coatings. It provides compatibility with a broad range of resin systems and offers:

Key benefits

- Broad pigment affinity
- Good stability against flooding, floating and flocculation
- Strong viscosity-depressing effects

Chemical nature

Acrylic block copolymer

Properties

Physical form

Viscous, amber-colored liquid

Technical data
(not supply specification)

Active ingredients		> 97%
Amine value	(20 °C)	37 – 44 mg KOH/g
Color number	Gardner (20 °C)	≤ 14

Application

Efka® PX 4705 has excellent compatibility with most resin systems used in radiation curing applications and solvent-based coatings and is especially suitable for the production of Resin Containing Pigment Concentrates (RCPC), in combination with a multi-compatible dispersing resin.

Efka® PX 4705 uses multiple, complementary pigment affinity mechanisms and is therefore highly suited to disperse a broad range of pigments, from inorganics to organic pigments and carbon blacks.

Recommended concentrations

Calculation method to estimate the minimum required amount of active dispersant on pigment:

Inorganic pigments	10 – 15 % on oil absorption value
Organic pigments (green, blue, violet)	15 – 30 % on BET value
Organic pigments (yellow, orange, red)	15 – 45 % on BET value
Carbon blacks (LCF)	15 – 20 % on DBP value
Carbon blacks (HCC)	40 – 50 % on DBP value

It is recommended to perform ladder studies to determine the optimal dispersant dosing.

Efka® PX 4705 should be incorporated in the mill base before adding the pigments.

Storage

Efka® PX 4705 should be stored in a cool and dry place.

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Validity

This Technical Data Sheet is valid for all versions of the Efka® PX 4705.

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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