Technical Information

Efka® PX 4751

general

high-molecular-weight dispersing agent

EFKA® PX 4751 is a dispersing agent that is suitable for solvent-based industrial and automotive coatings. EFKA® PX 4751 is based on a proprietary process.

EFKA® PX 4751 offers high efficiency in stabilizing pigments and demonstrates a wide compatibility with many solvent-based resin systems.

- high pigment loading at low mill base viscosity
- high efficiency with and without a pigment synergist
- especially suitable for optimum dispersion of α Cu-phthalocyanine pigments
- high gloss levels because of excellent compatibility

chemical nature

Polymer with pigment-affine groups

Properties

physical form

clear yellowish liquid

shelf life

EFKA® PX 4751 should be stored in a dry and cool place. When kept in original unopened containers, it can be stored for up to 4 years from the date of manufacture.

typical properties (no supply specification)

solvent	1-methoxy-2-propyl acetate
density at 20 °C (68 °F)	~ 1.03 g/cm^3
active ingredients	~ 51 %
amine value	~ 12 mg KOH/g
color	≤ 7

Application

EFKA® PX 4751 is highly suitable to be used in Resin-Minimal Pigment Concentrates (RMPC) for a wide range of solvent-based industrial and automotive coatings.

industrial coatings	automotive coatings
solvent-based 2-pack PUR	OEM: acrylic/melamine
solvent-based 2-pack acrylics	OEM: polyester/melamine
solvent-based 2-pack EP	refinish: 2-pack PUR

EFKA® PX 4751 delivers optimum performance on α Cu-phthalocyanine pigments. For β Cu-phthalocyanine pigments it is recommended to also test CGPS 242-30.

guideline formulations for resin-minimal pigment concentrates (RMPC)

	Heliogen® Blue L6950
Colour Index (Pigment…)	PB 15:1
EFKA® PX 4751	6.0
Methoxy propyl acetate	67.30
Laropal A81, 60% in MPA	16.70
Pigment	10.00
	100.00

recommended concentrations

The addition levels are recommended for starting formulations. For optimum results a ladder study should be performed in the customer specific binder formulation

Calculation method to estimate the minimum required amount of active ingredients on pigment (solid dispersant on …):

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

EFKA® PX 4751 should be incorporated in the mill base before adding the pigments.

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.

BASF SE
Formulation Additives
67056 Ludwigshafen, Germany
www.dispersions-pigments.basf.com
formulation-additives-asia@basf.com
formulation-additives-europe@basf.com
formulation-additives-nafta@basf.com
formulation-additives-south-america@basf.com