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Efka® PX 4780

Product description

Efka® PX 4780 is a high molecular weight dispersing agent designed to disperse and stabilize organic pigments and carbon-blacks. Use of Efka® PX 4780 results in significantly lower pigment paste viscosity without having to use high level of dispersant. Efka® PX 4780 is suitable for industrial and automotive coatings*, especially where resin-matrix reactive dispersant is desired.

Key benefits

- Exponentially lower pigment paste viscosity at lower addition levels
- Relatively consistent and stable viscosity over wide addition range
- Cross-linkable with -NCO and melamine-based resin matrices for optimal durability
- Exceptional jetness for carbon black pigments
- Excellent gloss development
- Highest available transparency in CAB-containing systems

Chemical nature

Polymer with pigment-affinic groups

Properties

Physical form

Viscous liquid to waxy solid

Technical data
(not supply specification)

Solvent	Solvent-free
Active ingredients	~ 100 %
Amine value	~ 20 mg KOH/g

* To comply with US EPA requirements currently, Efka® PX 4780 is recommended for use in automotive coatings only in the US.

Application

Efka® PX 4780 is highly efficient dispersant for Resin-Free Pigment Concentrates (RFPC) to be used in a wide range of solvent-based industrial and automotive coatings.

Efka® PX 4780 can also be used in single dispersant based direct grinding of pigments or as a part of Resin-Containing Pigment Concentrates (RCPC).

Formulation guideline

An example formulation for resin-free pigment concentrates (RFPC):

Butyl acetate	65.3
Butyl glycol	10.0
Efka® PX 4780	11.7
Monarch 1300	13.0
	100.0

The following starting point dry-over-dry addition levels, based on pigment loading, are recommended for pigment concentrates. For optimum results, a ladder study should be performed in the specific binder formulations.

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

Storage

Keep container tightly closed and dry; store in a cool place.
Storage temperature: 15 - 50 °C .
If substance/product crystallizes, heat to 40-50°C and homogenize.
Product may discolor when exceeding the recommended storage temperature

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Validity

This Technical Data Sheet is valid for all versions of the Efka® PX 4780.

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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