BASF
We create chemistry

Efka® PX 4732

general

high-molecular-weight dispersant

Efka® PX 4732 is an advanced polymeric dispersant with a core-shell structure. It offers the following benefits:

- 100% active, liquid dispersant
- developed specifically for inkjet inks to provide the critical combination of strong viscosity suppression and excellent storage stability
- particularly effective in strong-solvent systems , i.e., polar systems based on acetates or ketones
- good performance in UV-curable ink jet systems
- suitable for use in UV-curable ink systems including UV-curable flexographic and screen inks
- well suitable for UV-curable and even solvent-based resin-free pigment concentrates (RFPC) for a wide range of applications

The product is somewhat more polar in nature than Efka® PX 4731.

chemical nature

polymer with pigment-affine groups

Properties

physical form

brown viscous liquid

storage

Efka® PX 4732 should be stored in a cool dry place. Storage at temperatures below 10 °C (50 °F) may lead to partial solidification. Reliquefy by heating contents to 35 – 40 C (95 –102 °F).

typical properties (no supply specification)

active ingredients	100 %
amine value	~ 25 mg KOH/g

Application

Efka® PX 4732 is a dispersant with broad compatibility with different ink systems and pigments and is particularly recommended for:

UV-curable	solvent-based	water-based
inkjet inks	inkjet inks (“strong solvent”)	not recommended
flexographic inks	inkjet inks (“mild solvent”)	

Efka® PX 4732 is excellent in stabilizing organic and inorganic pigments in low-viscosity systems based on acrylate-functional UV monomers and in organic solvents.

The stabilizing properties of the dispersant are so strong that even stable resin-free concentrates in organic solvents can be made at use levels that would normally demand a complementary dispersing resin.

recommended concentrations

Appropriate use levels depend on pigment selection, dispersing medium and let-down composition. A ladder study should be performed to determine the optimum use level. Efka® PX 4732 should always be incorporated before addition of pigment.

use levels for inkjet ink formulations:
The optimum level can generally be found in the range of 20 – 0 % Efka® PX 4732 calculated on pigment load.

use levels for UV-curable flexographic formulations:
The optimum level can generally be found in the range of 2.5 – 10.0 % calculated on pigment load. Such levels offer significantly reduced mill base viscosity and nearly Newtonian flow.

The minimum required amount of active dispersant can be estimated from the specific surface area or oil absorption value of the pigment. Calculated amount can be used as a starting point for ladder studies.

inorganic pigments	10 – 20 % on oil absorption
organic pigments	15 – 45 % on BET value
carbon blacks	15 – 20 % on DBP value

Contacts worldwide

Asia
BASF East Asia Regional Headquarters Ltd
45/F, Jardine House
No. 1 Connaught Place
Central Hong Kong
China
formulation-additives-asia@basf.com

North America
BASF Corporation
11501 Steele Creek Road
Charlotte, NC 28273
USA
formulation-additives-nafta@basf.com

Europe
BASF SE
Formulation Additives
67056 Ludwigshafen
Germany
formulation-additives-europe@basf.com

South America
BASF S.A
Rochaverá - Crystal Tower
Av. das Naçoes Unidas, 14.171
Morumbi - São Paulo-SP
Brazil
formulation-additives-south-america@basf.com

Validity
This Technical Data Sheet is valid for all versions of the Efka® PX 4732.

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.

www.basf.com\formulation-additives