

# Dispex<sup>®</sup> Ultra PX 4575

## general

high-molecular-weight dispersing agent based on controlled free radical polymerization technology (CFRP)

Dispex<sup>®</sup> Ultra PX 4575 is a water-based dispersant made by Controlled Free Radical Polymerization (CFRP). This technology allows the synthesis of polymeric dispersants with highly defined polymer architecture and a low poly-dispersity index. Dispex<sup>®</sup> Ultra PX 4575 is especially suited for the dispersion of pigments in water-borne coatings and colorants.

## chemical nature

acrylic block copolymer formulation in water

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## Properties

### physical form

clear, slightly yellowish liquid

### shelf life

Dispex<sup>®</sup> Ultra PX 4575 may partially solidify when stored below 10 °C (50 °F). Heat to 35–40 °C (95–104 °F) to reliquify. 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	water
VOC*	No VOC*
active ingredients	~ 40 %
amine value	~ 32 mg KOH/g
color	≤ 9

\* VOC typically < 0,1% according to ISO 11890-2 and typically < 0,4% according to EPA-24

\*\* More details concerning product specification can be provided via your contact person

## Application

Dispex® Ultra PX 4575 offers high efficiency in stabilizing pigments and demonstrates wide compatibility with many water-based resin systems.

The new Dispex® Ultra PX 4575 is a universal dispersing agent with particular good performance in inorganic pigments which complements Efka® 4585 which has an excellent performance for organic pigments. This makes Dispex® Ultra PX 4575 ideally suited for the use of the concept of resin-free pigment concentrates (RFPC).

Dispex® Ultra PX 4575 is very broad in its compatibility with different water-based resins and pigments.

- decorative coatings based on acrylics, alkyds
- industrial coatings based on acrylics, 2-pack PUR
- automotive OEM coatings based on urethane modified polyester
- melamine, thermosetting acrylic dispersion
- refinish based on: 2-pack PUR
- for high performance water based paints

Dispex® Ultra PX 4575 can be used

- for organic and inorganic pigments
- in resin-free pigment concentrates (RFPC)
- in resin containing pigment concentrates
- for water-based architectural in-plant tinters
- for high performance water based paints

## recommended concentrations

Calculation method to estimate the minimum required amount of actives/solids ingredients on pigment:

inorganic pigments	10–20 % on oil absorption value
organic pigments	25–50 % on BET value
carbon blacks (LCF)	15–20 % on DBP value
carbon blacks (HCC)	50–80 % on DBP value

The correct dosage of dispersing agent should be determined in a ladder study where the starting point can be calculated using above calculation method.

Dispex Ultra PX® 4575 should be incorporated into 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.

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