

# Dispex<sup>®</sup> CX 4240

## general

- highly effective, low-viscosity dispersing agent for water-based coating systems
- especially suitable for the dispersion of inorganic pigments
- allows formulations of high-gloss/low-pigment-volume-concentration coatings in addition to standard matt formulations.

## chemical nature

solution of an ammonium salt of an acrylic polymer in water

## Properties

### physical form

straw-colored liquid

### storage

Although Dispex<sup>®</sup> CX 4240 is freeze-stable it should be stored at temperatures above 5 °C (41 °F) to allow easy handling.

### typical properties (no supply specification)

solvent	water
density at 20 °C (68 °F)	~ 1.20 g/cm <sup>3</sup>
solid content	~ 40 %
active content	~ 39 %
viscosity at 20 °C (68 °F)	~ 400 mPa·s
pH	~ 7.5

## Application

Dispex<sup>®</sup> CX 4240 is an ideal dispersing agent for a wide range of water-based coatings. The special copolymer backbone is designed for complete compatibility with polypropylene and hexylene glycols used in high proportions in water-based high-gloss coatings to promote wet-edge time.

The use of Dispex<sup>®</sup> CX 4240 is especially recommended when high-gloss/low-pigment-volume-concentration coatings are formulated.

The neutralizing alkali used in conjunction with the acrylic polymer can significantly impact the properties of the final coating. Dispex<sup>®</sup> CX 4240 releases ammonia during the drying process and therefore has little impact on the resistances to water and alkali of the dry film.

The use of Dispex® CX 4240 should be limited to pH 5 – 10.5 and temperatures lower than 70 °C (158 °F) due to potential loss of volatile ammonia.

Dispex® CX 4240 is based on an organic polymer and provides improved storage stability of both pigment dispersion and formulated paint when compared with inorganic dispersing agents, e.g., polyphosphate products. There is little or no adverse reaction to high temperatures.

**incorporation**

As opposed to adding the dispersing agent to a pigment slurry, the pigment should be added to heavily stirred water to which the dispersing agent had been added. In general, the pH of the final preparation should be in the region of 8.5 to obtain optimum dispersing efficiency.

**recommended concentrations**

Recommended dosages of Dispex® CX 4240 depend on the nature of the solids to be dispersed. In general the dosage is between 0.8 – 1.5 %, calculated on the total formulation. In critical formulations it is possible to increase the dosage up to 2%.

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**Validity**

This Technical Data Sheet is valid for all versions of the Dispex CX 4240.

**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.

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