

This product was previously marketed as ADDITOL® XW 440. All specifications, formulations, and performance characteristics remain unchanged.

TYPE

Anionic wetting and dispersing agent for pigments
Aqueous solution of a sodium salt of a low-molecular polyacrylic acid

PRODUCT DATA

Determined per batch:

Colour / Appearance VLN 250

colour appearance pale yellow clear

Dynamic Viscosity DIN EN ISO 3219

dynamic viscosity (25 1/s; 23 °C) [mPa.s] 500 - 2000

pH-Value DIN ISO 976

pH-value (10 %) 7,0 - 8,0

Iodine Colour Number DIN 6162

iodine colour number <= 5

Non-Volatile Matter DIN EN ISO 3251

non-volatile matter (1 h; 125 °C; 1 g) [%] 39,0 - 41,0

Not continually determined:

Density (Liquids) DIN EN ISO 2811-2

density approx. (20 °C) [g/cm³] 1,29

Flash Point (Pensky-Martens) DIN EN ISO 2719

flash point [°C] > 100

FORM OF DELIVERY (f.o.d.)

Active substance

approx. 40 %

SPECIAL PROPERTIES

- Excellent dispersant efficiency
- Improves the pigment wetting
- Shortens the dispersion time
- Reduces the mill base viscosity
- Use in wide range of PVC
- Enhances storage stability of the emulsion paint
- Highly compatible HEC, ASE and HASE rheology modifiers
- Low VOC
- Enhances gloss
- Cost effective

SUGGESTED USES

ADDITOL® XW 440 DISP additive, together with polyphosphates (e.g. Calgon N), is used in emulsion paints for dispersing and wetting in pigments and extenders. The product can be employed for all the usual emulsions, e.g. homopolymer and copolymer polyvinyl acetate, polyacrylic and styrene/acrylic copolymer dispersions.

ADDITOL® XW 440 DISP additive improves the storage stability of highly pigmented emulsion paints and prevents them from thickening.

PROCESSING

The quantity of ADDITOL® XW 440 DISP additive used depends on type and quantity of pigments and extenders in the paint formulation. Generally, the quantity added is 0.1 - 1 % (solids ADDITOL® XW 440 DISP calculated on pigment/extender mix). For silicate containing extenders and anatase grades of titanium dioxide, a combination with polyphosphates improves the stability of the dispersed pigments. A suitable amount is about 0.2 % ADDITOL® XW 440 DISP and 0.2 % polyphosphate (always in terms of solids on the pigment /extender mix). An excess of ADDITOL® XW 440 DISP additive is liable to set off an electrolytic effect which produces coagulation, particularly when the emulsion systems are sensitive. When more ADDITOL® XW 440 DISP is used, the compatibility must be established by preliminary tests.

For the manufacture of emulsion paints ADDITOL® XW 440 DISP must be added to the pigment paste or the dispersion as a solution which has been diluted 1 : 3 with water.

STORAGE

At temperatures up to 25 °C storage stability packed in original containers amounts to at least 730 days.

ADDITOL® XW 440 DISP is sensitive to temperature below the freezing point. While freezing does not affect the quality of the product, owing to the composition of ADDITOL® XW 440 DISP, freezing entails an increase in volume which may cause bursting of the containers. Thus, care should be taken to store ADDITOL® XW 440 DISP above freezing temperatures.