

FULACOLOR-XW

Acid leached phyllosilicate with an exceptional whiteness and fineness to produce reactive and adsorbent paper coatings.

Product Data

Composition

Acid leached phyllosilicate

Typical Properties

The values indicated in this data sheet describe typical properties and do not constitute specification limits.

Supplied as:	White Powder
Moisture content:	6 %
Whiteness:	88 %
Particle Size, D ₅₀ :	4.4 µm
Particles > 45 µm:	10 ppm
Oil Absorption:	108 g/100 g
pH value (2 % in H ₂ O):	4.0
Bulk density:	580 kg/m ³

Food Contact Legal Status

For the current food contact legal status, please contact our product safety department or visit www.byk.com for further information.

Storage and Transportation

FULACOLOR-XW should be transported and stored dry in the unopened original container with good ventilation.

Applications

Paper Coatings

Special Features and Benefits

FULACOLOR-XW is used as a component in paper coatings to produce reactive and adsorbent surfaces. This makes FULACOLOR-XW particularly suitable in carbonless copying paper as a reactive color developer and in inkjet papers where it improves the color intensity and sharpness of the printed image, and reduces the drying time to prevent smudging.

Recommended Use

Carbonless copy paper	<input checked="" type="checkbox"/>
Inkjet printing paper	<input checked="" type="checkbox"/>

☒ especially recommended ☐ recommended

Incorporation and Processing Instructions

We recommend the following starting formulations for using FULACOLOR-XW in carbonless copy paper and inkjet printing paper:

Carbonless copy paper (dry basis)

FULACOLOR-XW	60 parts
Non-reactive pigment*	40 parts
Binder (styrene-butadiene resin)	25 parts

*typically calcium carbonate or kaolin

Inkjet printing paper (dry basis)

FULACOLOR-XW	40 parts
Calcium carbonate	60 parts
Binder (polyvinyl alcohol)*	15 parts
Cationic Fixative**	10 parts

* partially hydrolysed or saponified polyvinyl alcohol

** PolyDADMAC fixative required to fix anionic dye based inks

As required, other additives such as wetting and dispersing agents, defoamers, optical brighteners, biocides etc. can be added.

The amount of added water is guided by the available dispersion equipment, the coating method, the target coat-weight, quality targets etc. and is ideally determined by coating trials.

To achieve the optimum performance of FULACOLOR-XW, complete dispersion is required. This is best achieved when the pH value of the coating color, following addition of the FULACOLOR-XW powder, is approximately 7.5. The following procedure for incorporation is highly recommended:

- Add the quantity of water that is required for the desired solids content
- Add the quantity of caustic reagent that is required to give a pH in the range 7-8 following the FULACOLOR-XW addition. Sodium hydroxide is usually used as the caustic reagent.
- Add the FULACOLOR-XW in several aliquots allowing time for complete dispersion of each aliquot before addition of the next.
- As solids increase so viscosity will increase and it may be necessary to reduce the aliquot size or increase the time between each addition
- Once the full amount of FULACOLOR-XW is added and fully dispersed the other formulation components are added.
- Finally the pH value is adjusted for the relevant printing application. For carbonless copying paper this is typically 9-10.

Note: The size of the individual portions and their dispersion times depends on the equipment being used and is ideally determined by means of dispersion tests.



Additive Guide



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