

Fluorescent Whitening Agents For Paper



MEGA WHITE UP LIQUID

APPLICATION

High affinity FWA for Wet end and coating

FORMULATION

Cold resistant product

SPECIAL BENEFITS

Neutral shade and low greening tendency
Particularly recommended for soft water
Suitable for mechanical and secondary fibers
FWA for casein and protein containing
Coating colours



MEGAWHITE UP LIQUID

Megawhite UP Liquid is a disulpho - type Fluorescent Whitening Agent [FWA] tailored to the specific needs of the paper industry.

Uses **Fluorescent whitening in the furnish.**

Megawhite UP Liquid is a highly suitable for fluorescent whitening in the furnish at slightly acid or neutral pH. The product provides particular advantages if soft water is used and uptake times are short.

Megawhite UP Liquid is especially recommended for addition to furnish containing large properties of mechanical pulp or secondary fibre.

Megawhite UP Liquid at the size press

We do not recommend the use of **Megawhite UP Liquid** for this application.

Fluorescent whitening in Surface coating.

Megawhite UP Liquid is preferably incorporated in coating mixes together with casein or protein / latex also in conjunction with synthetic co-binders.

Properties	Appearance	Clear yellowish to yellowish brown liquid.
	Chemical constitution	Derivative of 4,4'-diaminostilbene-2,2' disulphonic acid
	Miscibility	Miscible with water in all properties
	PH	9 - 10
	Solubility	any proportion
	Density at 25 °C	1.20 g/ml at 25 °C
	Viscosity at 25 °C	Max. 50 mPa.s at 25 °C
	Ionic character	Anionic

Storage stability

Megawhite UP Liquid has good stability and cold temperatures. Prolonged storage at temp. Below - 10 ° C can results in product freezing. Frozen product can be restored to its original state without loss of effectiveness by leaving to stand at room temp. or heating briefly to temp. no higher than 50 ° C.



☛ Shade

Megawhite UP Liquid gives a neutral shade in all applications. It only has a tendency to produce a greens hue if too large amounts are used.

☛ Physiological and ecological notes

The usual hygiene and safety rules for handing chemicals must be observed in storage, handling and use.

The LD50 is rats is higher than 5000 mg/kg body weight. In tests on rabbits, the product was found to have no irritation on skin or mucous membrane.

Further information is given in the Safety Data Sheet.

The product is permitted for food packaging in accordance with recommendation XXXVI of the plastic commission of the German public Health Office (Kunststoffkommission des BGVV), provided the active ingredient is not more than 0.3% and the FWA does not migrate onto the food as described in DIN 53991, p.2, or EN 648, Oct. 1993.

☛ Megawhite UP Liquid in the wet end application

Megawhite UP Liquid has outstanding affinity and is very effective in unsized papers. It is also notes for good affinity even with very soft water (<7° G.h. or < 70 ppm CaO). Largely unaffected by cationic substances, it can readily be used for papers sized with synthetic additives.

The product is particularly suitable for fluorescent whitening in acid sized loaded papers at a pH level of 4.8 - 8.5 and has considerable advantages over tetrasulpho products when used in amount of less than 0.4%.

Megawhite UP Liquid can be dispensed intermittently at either the pulper or the mixing chest as liquid or as stock solution. It should always be added before the alum or cationic additives and never together with alum or other additives.

With its high affinity, **Megawhite UP Liquid** is the product of choice for continuous dosing, including at a point in the circuit where the stock is of low consistency.

Average dosage 0.05 - 1.0% at pH level above 5

0.05 - 0.4% at pH level below 4.8



- **Megawhite UP Liquid at the size press application**

As stated above, Megawhite UP Liquid is not the ideal product for size press application and we recommend using a Megawhite SI, Megawhite AP type product, Megawhite BSU or Mega White AS.

- **Megawhite UP Liquid in coating.**

Excellent results can be obtained by applying **Megawhite UP Liquid** in coating mixes based on casein or protein, as co-binders.

The best effects are achieved with coating mixes containing synthetic co-binders and latex.

Megawhite UP Liquid should not be used in coating compounds with starch as binder. For these applications we recommended using a Megawhite AP type, Megawhite AS type or Megawhite BSU type product.

Average dosage 0.1 - 1.0% Megawhite UP Liquid (based on the pigment)

The information and recommendations contained in this data sheet are to the best of our knowledge correct, but no guarantee is given in this respect and no responsibility can be accepted for the results obtained.