

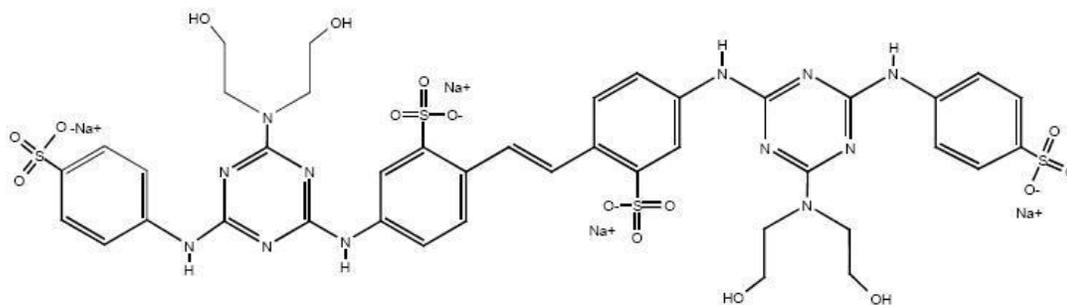
OPTICELL B200% (TETRASULFO)

Opticell B200% is an optical brightening agent designed for every type of sized and coated papers.

Opticell B200% absorb the light in the ultraviolet range of the spectrum (under 370 nm) and re-emit this light in the visible range (435 nm) giving a fluorescent effect that produce better brightness and whiteness of paper.

Properties

<i>Appearance:</i>	Yellowish brown to reddish liquid.
<i>Chemical nature:</i>	4,4' diamine, stilbene 2,2' disulfonic acid, derivative.
<i>Ionic character:</i>	Anionic
<i>Density:</i>	1.05 -1.15 g/cm ³ at 25 °C
<i>pH :</i>	8.0 – 11.0
<i>Solubility:</i>	Miscible in water.
<i>Viscosity :</i>	< 50 CPS at 25°C
<i>Chemical Structure:</i>	



Acid Fastness

Opticell B200% has good acid fastness. It is possible to get good brightening effects upward pH 4, including with high doses. This data only apply when the aluminum ions concentration in white water is not higher, and it can be used with recycled water.

Substantivity

Opticell B200% has good substantivity and also it is extremely suitable to give brightness in sized paper grades.

Maximum doses

Considering its low tendency to darkening, it may be used in furnish, upward 1.5% of **Opticell B200%**. When working with high doses, ensure that pH does not fall below 4.5.

Behavior in coated papers.

Opticell B200% has a good performance in papers coated with kaolin and CaCO_3 .

Applications

In furnish, **Opticell B200%** may be used to give brightness in all type of sized or coating papers. Their good acid and sizing agent fastness ensures a perfect process even at low pH. **Opticell B200%** is particularly effective for coated papers with CaCO_3 .

Opticell B200% should be diluted before use, however, because of their good solubility they also may be sprayed directly into the pulper or into the machine chest provided if it is possible, of a vigorous mixing, or pump suction, specially disulfonic and tetrasulfonic types. To achieve an optimum brightness in sized papers it is admissible to add optical brighteners before aluminum sulfate and any other cationic additive.

Surface coating

Opticell B200% is suitable to be used with surface sizing with starch. The effects may be enhanced dosing a little quantity of CMC at the starch solution.

Recommendation for papers with high grade papers:

The main factor which affect the use of Optical Brightening Agents for coating paint is the hydrophilic co-binder content which help and act as stabilizer for optical brightening agents, like:

- Polyvinyl Alcohol(PVA)
- Carboximethyl Cellulose
- Melamine Formaldehyde Resins
- Polyglycols
- Polyacrylates
- Starch
- Casein

The following problems may be when the co-binder content is lower:

- Low bright

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- Low darkening limit
- Low effectiveness of optical brighteners.

Opticell B200% has been made to use in coating paints containing starch, PVA or CMC such as co-binders. For casein base coating paints and paint with a high content of optical brightener which contain PVA and/or CMC as co-binder, is a better liquid.

FDA Regulations

Opticell B200% may be used as an additive in the manufacture of paper and board for packaging in contact with aqueous and fatty foodstuffs (21 CFR 176.170(A)), which is FDA approved.

Toxicology

The toxicological assays obtained with **Opticell B200%** show that the products is not a health hazardous matter. The trials include an acknowledgment of tolerability in skin mucous membranes and sensitive areas. The normally found quantities in the effluent do not damage fishes. Similarly, they do not inhibit the activated mood functions in biological water treatment plants.

Packaging and Storage

Opticell B200% is not classified as hazardous. These products should be stored in fresh areas, where there is any direct contact with sunlight. Avoid store with foodstuffs.

Packing: 1,000 Kg containers and 20,000 Kg. pipe truck.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. Básicos y Colorantes S.A. de C.V. will not be responsible for damages resulting from use of or reliance upon this information.

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