

NSD BRITE M

NSD BRITE M is a fluorescent whitening agent in liquid form for universal application in sized and filled papers and for surface sizing and coating.

General Properties

Chemical composition	Derivative of 4, 4-diaminostilbene - 2,2-disulphoinc acid.
Ionicity	Anionic
Solid Content	19 ± 1
Density	Approx. 1.2 g/cm ³ @ 2°C.
pH	8 - 9
Shade of white	Blue-tinged, practically neutral white.
Solubility	Freely miscible with water.
Sizing stability	Good

Maximum addition

Because of its slight tendency to graying, NSD BRITE M can be used in the paper pulp in amounts up to roughly 1.5% NSD BRITE M. At such high additions, the pH should not be less than 4.5.

Behavior in filled papers: It is a highly effective in paper filled with kaolin or clay.

Substantively: NSD BRITE M has good substantively and is there for highly suitable for brightening sized papers in the pulp.

Acid resistance: NSD BRITE M has good acid resistance. Good brightening effects are obtained up to pH 4 even at high additions to the paper pulp, e.g. 1.5% NSD BRITE M.

If smaller amounts are added, e.g. 0.375%, the products remain effective up to as much as

pH 3. These data only apply if the Aluminum ion concentration in the circulating water is not too high, as may be the case in a closed circuit.

Application

1 -Paper pulp

Because of its outstanding properties, **NSD BRITE M** is universally applicable for brightening sized and filled papers. Its good resistance to acid and sized ensures reliable processing even at low pH values. In clay-filled papers in particular, **NSD BRITE M** is highly effective at medium filler additions.

To obtain the optimum brightening effect, it is advisable to add the fluorescent whitening agent to the sized papers before acidifying with alum.

2-Paper Surface

NSD BRITE M is highly suitable for surface sizing with starch. In many cases, the effects can be further improved by adding a small amount of carboxymethyl cellulose to the starch solution outstanding brightening effects are obtained in pigmented coating compounds, especially those containing starch and plastic dispersions as binders.

As **NSD BRITE M** has a slight tendency to graying, addition of 15 g/kg coating compound is possible.

3- Shading

The white effect produced with **NSD BRITE M** can be further improved by adding suitable shading dyestuffs. Pigments are preferable, as the usual basic and acid shading dyestuffs so not have adequate high fastness in the low concentrations used.

In general 1-3 g fine paste per 100 kg paper pulp or 100 kg coating compound is sufficient. By selecting suitable combinations of dyestuffs it is also possible to charge the shade of the papers in a particular direction.