

DIKAPHOR AAP CONC.

OPTICAL WHITENER FOR DETERGENTS

Dikaphor AAP Conc. is an optical whitening agent primarily intended for cellulosic fibres, which gives a very high white effect in anionic and non-ionic detergents and detergents containing soap.

GENERAL PROPERTIES

Appearance	Pale yellowish white powder.
Solubility	Dikaphor AAP Conc. is soluble in boiling water (5-7 gm/l).
Fibre affinity	Dikaphor AAP Conc. Exhausts on to all cellulosic fibres.
Shade of white effect after several washes	Dikaphor AAP Conc. gives a reddish white of outstanding brightness.

EXHAUSTION

Dikaphor AAP Conc. Exhausts on to cellulosic textiles from detergents containing soap as well as from synthetic anionic and non-ionic detergents. The pH range is 7-11.

Build up The white effect on cellulosic textiles increases steadily with repeated washing until the maximum is reached after 20-25 washes. Owing to the purity of the white shades, build up does not causes any undesirable discoloration of the goods. The degree of accumulation depends on the amount of Dikaphor and the washing temperature: it is higher in hot wash liquors than in cold.

Graphs In the graphs a white scale has been used for the purpose of comparing white effects; the white scale is plotted along the ordinates. The white effects illustrated were produced under the following conditions:

detergent	5 gm/l heavy duty synthetic detergent
liquor ratio	20:1
washing time	10 minutes

The concentrations of Dikaphor AAP Conc. are given in grams per ton of detergent.

Optical whitening of detergent powder Dikaphor AAP Conc. usually gives considerable improvement in the whiteness of detergent powder. The white effect may vary slightly according to the composition of the powder.

APPLICATION

Uses	Dikaphor AAP Conc. can be added as a powder or as an aqueous suspension to the basic soap mass or to the slurry. Thorough stirring enables homogenous dispersion and ensures an optimum white effect. Aqueous dispersions may take the form of a yellowish gel under certain conditions (When left standing for several hours or when dissolved at too elevated a temperature). This is due to a physical change in the crystalline form and does not effect the whiteness of the goods though it may reduce the whiteness of the detergent powder. This change can however be largely prevented if an equal amount of common salt or Glauber's salt is added with the optical whitening agent.
Concentration	The recommended concentration is 0.1-0.3% Dikaphor AAP Conc. On the dry weight of the detergent (100-3000 grams per ton)

STABILITY IN THE WASH LIQUOR

Hard Water

Good. The intensity of the white is not effected by hard water.

Alkali

Good. Dikaphor AAP Conc. Is stable for relatively long periods in strongly alkaline media even at temperatures above 100°C.

Peroxide

Good. The white effect is not impaired by perborate bleaching agents or peroxide additions in the wash liquor.

Chlorine

Poor. Dikaphor AAP Conc. is slowly decomposed in a hypochlorite solution, but when fixed on the fabric it has good fastness to chlorine.