KAPPASALT PK 3
Buffer and stabilizer with anticorrosive for bleaching with sodium chlorite

CHEMICAL-PHYSICAL DATA
Chemical composition: mixture of inorganic salts
Appearance: white powder
pH-value 20 °C (1 %): approx. 10.0
Bulk weight (g/l): approx. 700
Ionic charge: anionic

FUNCTION
KAPPASALT PK 3 has buffering, stabilizing and anticorrosive properties.
In chlorite bleaching, the alkaline reactive sodium chlorite (NaClO₂) has to be activated with acid (formic or acetic acid) and temperature to develop its complete bleaching effect. The actual bleaching agent is the chlorous acid HClO₂ from which active oxygen is released.
At the same time it is necessary to carry out chlorite bleaching in a constant pH-range of 3.5 – 4.0 during the entire bleaching time to reduce the formation of chlorine dioxide (ClO₂) which is toxic, unpleasantly odorous, highly corrosive and without contribution to the bleaching process. Chlorine dioxide is formed in the strongly acid range.
KAPPASALT PK 3 buffers the pH adjusted with organic acid, as it counteracts against further decrease and thus regulates or stabilizes the decomposition time of the sodium chlorite.
Furthermore, KAPPASALT PK 3 contains active oxygen compounds, which again reduce the intermediately formed chlorine dioxide to the chlorite anion.
KAPPASALT PK 3 also protects stainless steel machinery against corrosion.

APPLICATION
Sodium chlorite is a fibre-protecting, oxidative bleaching agent with selective effect that usually is applied at temperatures of 70 – 95 °C and a pH-value of 3.5 – 4.0 in a long liquor.
The chlorite bleaching is therefore especially suitable for alkali-sensitive fibres (viscose, etc.), for linen (due to the long bleaching period) or for synthetic fibres difficult to bleach (polyester, polyamide, polyacrylonitrile).
Recommended application level:

1.5 – 3.0 g/l KAPPASALT PK 3

The bath is prepared with sodium chlorite and KAPPASALT PK 3. Then the pH is adjusted with formic or acetic acid.

DILUTION INSTRUCTION
KAPPASALT PK 3 can be diluted in cold or warm water.

STORAGE
KAPPASALT PK 3 remains stable for at least 1 year if stored properly and cool in a tightly closed container.