

Contribution to Circular Economy

Helping you use recycled water more efficiently

Countries' environmental policy and conservation of water resources has boosted usage of recycled water in textile wet processing. However, high level of salt, hardness, pH and other pollutants must be overcome, before the water becomes usable.

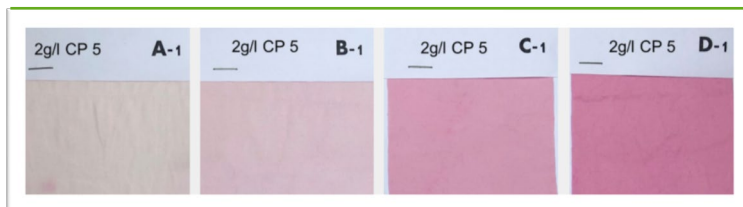
Maximize productivity in the challenging world

Parameter	Typical effluent	BASF solution
Sulphate, (SO ₄) mg/L	300 – 2,200	Cationic soaping polymer
Sodium ion	970 – 2,100	
Total hardness, mg/L	120 - 150	Eco-friendly chelate
pH	6 – 10	Alkaline stable formulation

Reactive dyes soaping using recycled water

Impact with big molecular size soaping agent

Na ₂ SO ₄	0 g/L	0 g/L	4 g/L	7 g/L
Ca ²⁺	0 ppm	800 ppm	600 ppm	800 ppm



Overcoming high electrolyte content and accumulated water hardness

- **Sokalan® PA 25, Sokalan® CP 12 S or Sokalan® PA 30** can be used to replace bigger maleic acid and acrylic acid copolymer, for better electrolyte compatibility
- Change soaping agent to cationic polymer - **Sokalan® HP 56**, for assured stable performance under high salt and water hardness content

Sokalan® types under severe condition

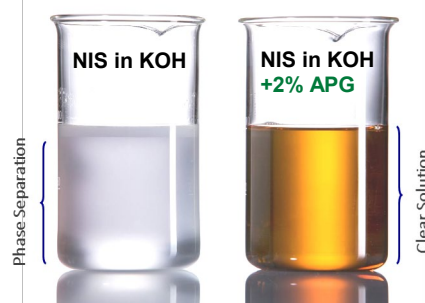
Na₂SO₄: 7 g/L
Ca²⁺: 800 ppm

2 g/L HP 56 0.2 g/L HP 56 2g/L CP 5 1 g/L CP 5
1 g/L PA 25



Solubilizer, alkaline stabilizer in formulation

- APG (Alkyl Poly-Glycoside surfactants) types from BASF improve alkaline stability of formulation and enhance solubility even at high electrolyte content



Agnique® PG 8107

Agnique® PG 8105

Agnique® PG 8101

Agnique® PG 8103

Agnique® PG 264

Emulsifying
Hydrophobicity
Electrolytic tolerance
Wetting

- Other hydrotropes, e.g. Emulan® EL, Lutensol® AT 25, Lutensol® AT 80, etc.

Removing insoluble contaminants

- Surfactant based dispersing polymers that have both hydrophobic and hydrophilic monomers, such as **Sokalan® CP 9, Lupasol® PN 80, Agnique® CP 72 L**, etc. help remove water insoluble contaminants

BASF
We create chemistry

Safety

We know of no ill effects that could have resulted from using our products for the purpose for which they are intended and from processing them in accordance with current practice. According to the experience we have gained up to now and other information at our disposal, our products do not exert any harmful effects on health, provided that they are used properly, due attention is given to the precautions necessary for handling Chemicals, and the information and advice given in our safety data sheet are observed. Use biocides safely. Always read the label and product information before use.

Labeling

Details about the classification and labeling of our products and further advice on safe handling are contained in the current safety data sheets.

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