

Reverse Osmosis Chemicals

Do not Compromise on Reliability



SCALE PREVENTION

After a certain duration of normal operation, Reverse Osmosis (RO) membrane elements are subject to scaling and fouling by impurities that may be present in the feed water. BASF developed specialty polymers based on aqueous solution of modified polycarboxylate, to ensure the reliability of the unit by preventing deposits. The unique features demonstrate:

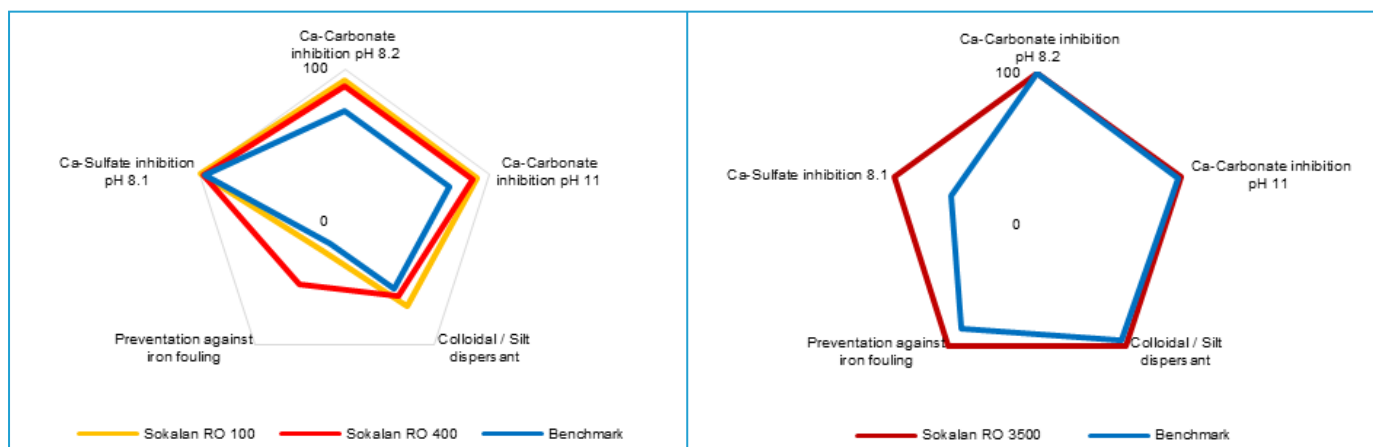
- Outstanding scale-inhibiting performance
- Compatibility with major available RO membranes
- Low environmental impact (no phosphorus content or low phosphorus content in the products)
- Longer operation time of RO desalination plants without cleaning
- Reduced production costs
- Higher output
- High-quality products and reliable supply from BASF

All the Sokalan® RO types are NSF/ANSI 60 certified for drinking water application.

Product	Description	Calcium carbonate inhibition	Calcium sulfate inhibition	Barium sulfate inhibition	Calcium phosphate inhibition	Colloidal / Silt dispersant	Protection against iron fouling	Phosphorus free	Low phosphorus content*
Sokalan® RO 100	Broad-spectrum scale inhibitor for line operation at high recovery rates	■	■	■		■	■		✓ 0.2 mg/L
Sokalan® RO 400	Phosphorus-free broad-spectrum premium scale inhibitor for line operation at high recovery rates	■	■	■		■	■	✓	
Sokalan® RO 3500	Specialty product to control iron with broad-spectrum scale inhibitor.	■	■	■	■	■	■		✓ 0.005 mg/L

■ Excellent performance ■ Good performance

* value at 5ppm dose rate and 75% recovery



Product Portfolio: Reverse Osmosis Chemicals

CLEANING

The cleaning operation prevents excessive fouling, which can become irreversible. It can also take place before a shutdown. Antiprex® CM, is a superior and readily biodegradable chelating agent. For acidic membrane cleaning, Antiprex® MSA, is a powerful, readily biodegradable acid, with low vapor pressure.

* Ethylene Diamine Tetra Acetic acid

** Methylglyncinediacetic acid

Product	Chemistry	Functionality
Antiprex® CE	EDTA*, tetrasodium salt 40% solution	Sequestering agent, specific scale removal
Antiprex® CE Powder	EDTA, tetrasodium salt	Sequestering agent, specific scale removal
Antiprex® CM	MGDA**, trisodium salt	Sequestering agent, specific scale removal
Antiprex® MSA	Methanesulfonic acid	Acidic cleaning, mineral scale removal
Burst® LX 80	Non-ionic surfactant	Cleaning improvement in combination with Antiprex® MSA, Antiprex® CE or Antiprex® CM

PRESERVATION

Membrane elements should be handled under certain conditions that reduce biological growth and keep membrane performance characteristics during long term storage, shipping or system shut downs.

Sodium metabisulfite (SMBS) is commonly used for removal of free chlorine and as a biostatic. When dissolved in water, sodium bisulfite (SBS) is formed from SMBS.

Product	Chemistry	Functionality
Sodium bisulfite solution	Sodium bisulfite (SBS)	Oxygen scavenger, dechlorination, preservation
Sodium metabisulfite (food grade)	Sodium metabisulfite (SMBS)	Oxygen scavenger, dechlorination, preservation<<<<<



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Contact Details

Europe, Middle East, Africa
 BASF SE
 Performance Chemicals
 Paper and Water Chemicals
 Carl-Bosch-Straße 38
 67056 Ludwigshafen, Germany
 Phone: +49 621 60-0
 (Further Reference: G-EVW/EM)
 water.solutions@basf.com
www.watersolutions.basf.com

