

Sokalan® RO 3500

New antiscalant especially developed to protect Reverse Osmosis units used for water reuse

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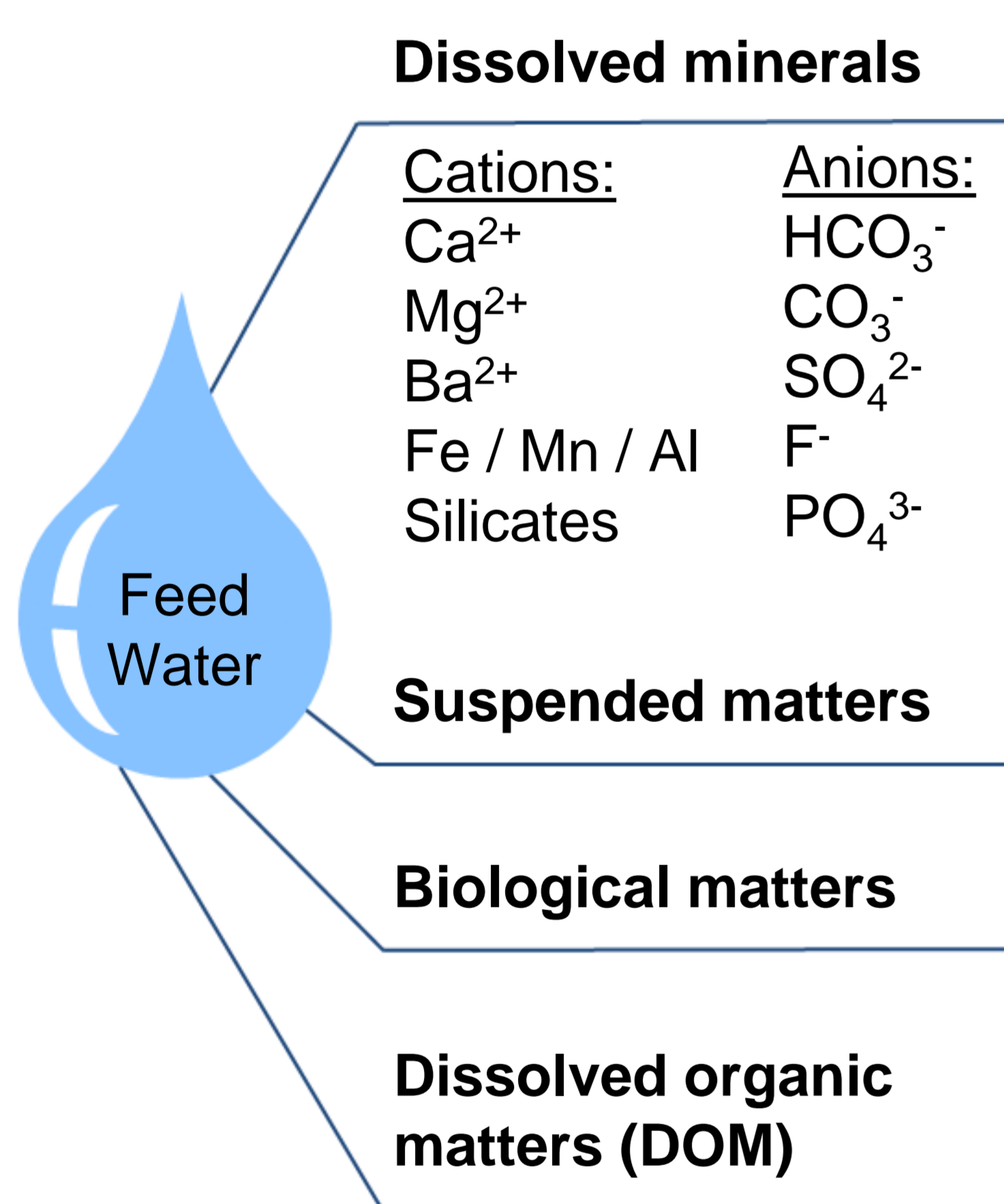
* BASF South East Asia Pte. Ltd., Singapore

** BASF SE, Ludwigshafen, Germany

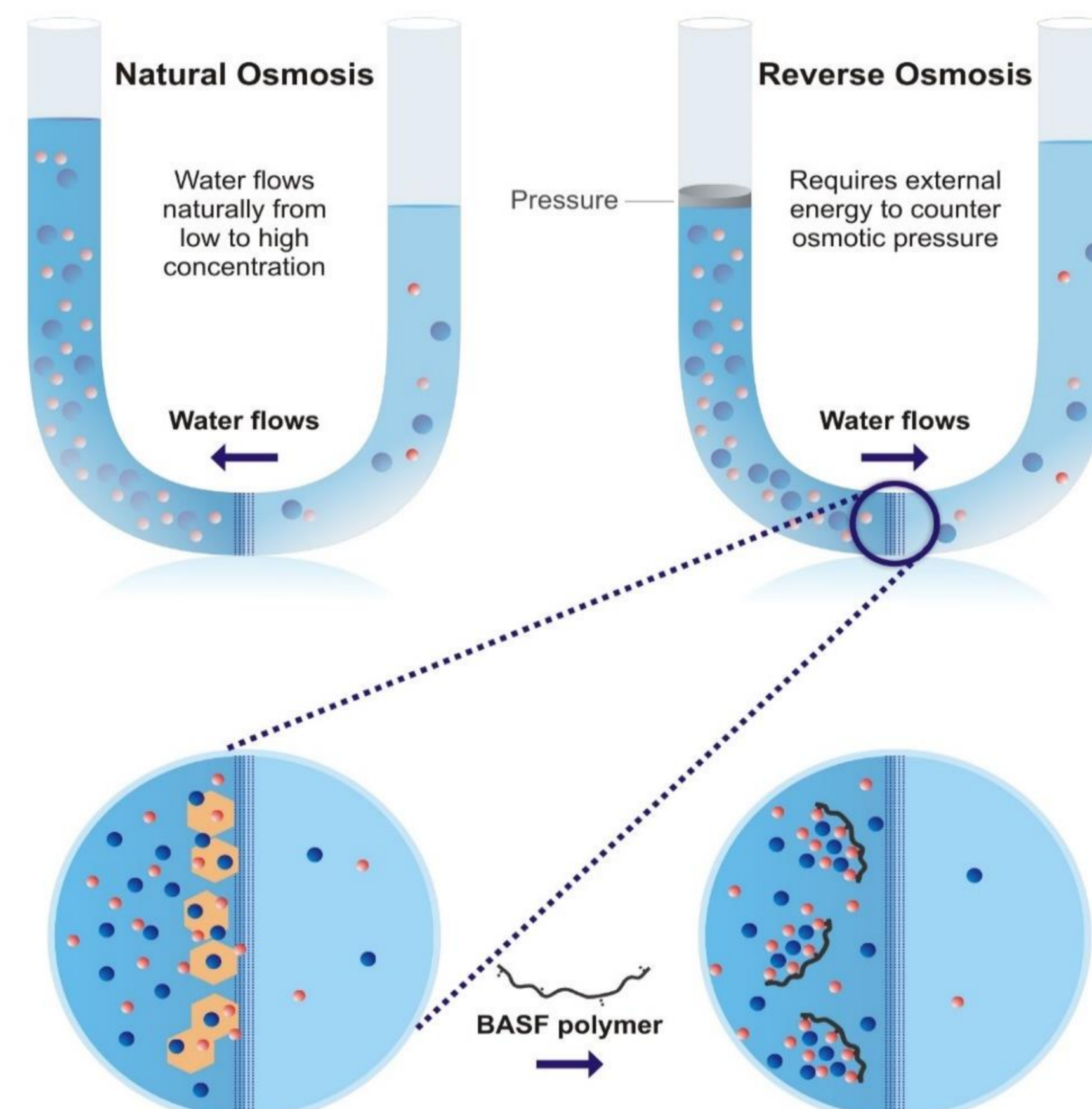
*** BASF Australia Ltd., Melbourne, Australia

Importance of antiscalants for RO processes

The complexity of the feedwater

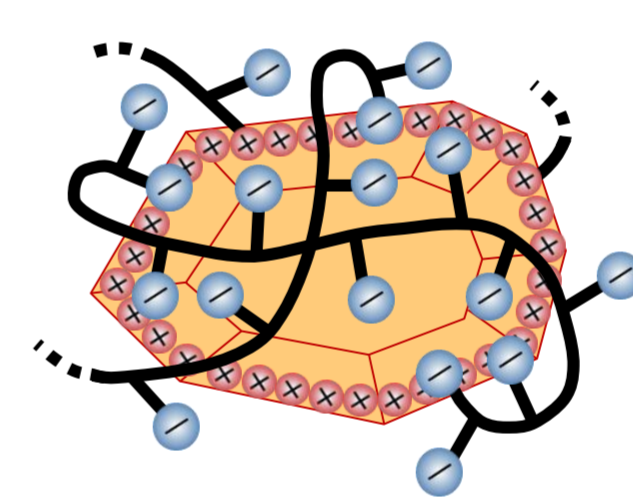


Concentration polarization of salts at the membrane surface

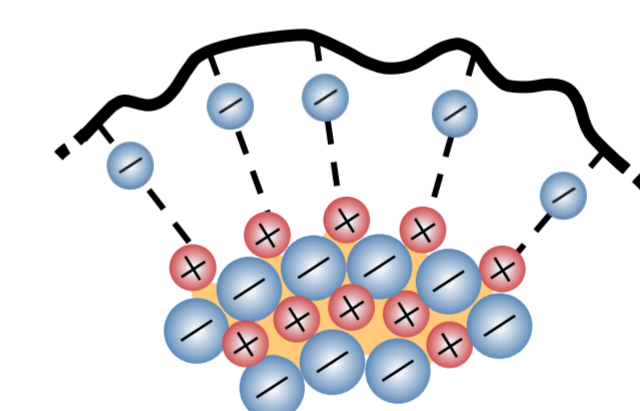


Solution: BASF Sokalan® RO with triple-mode of action

Crystal modification & dispersion



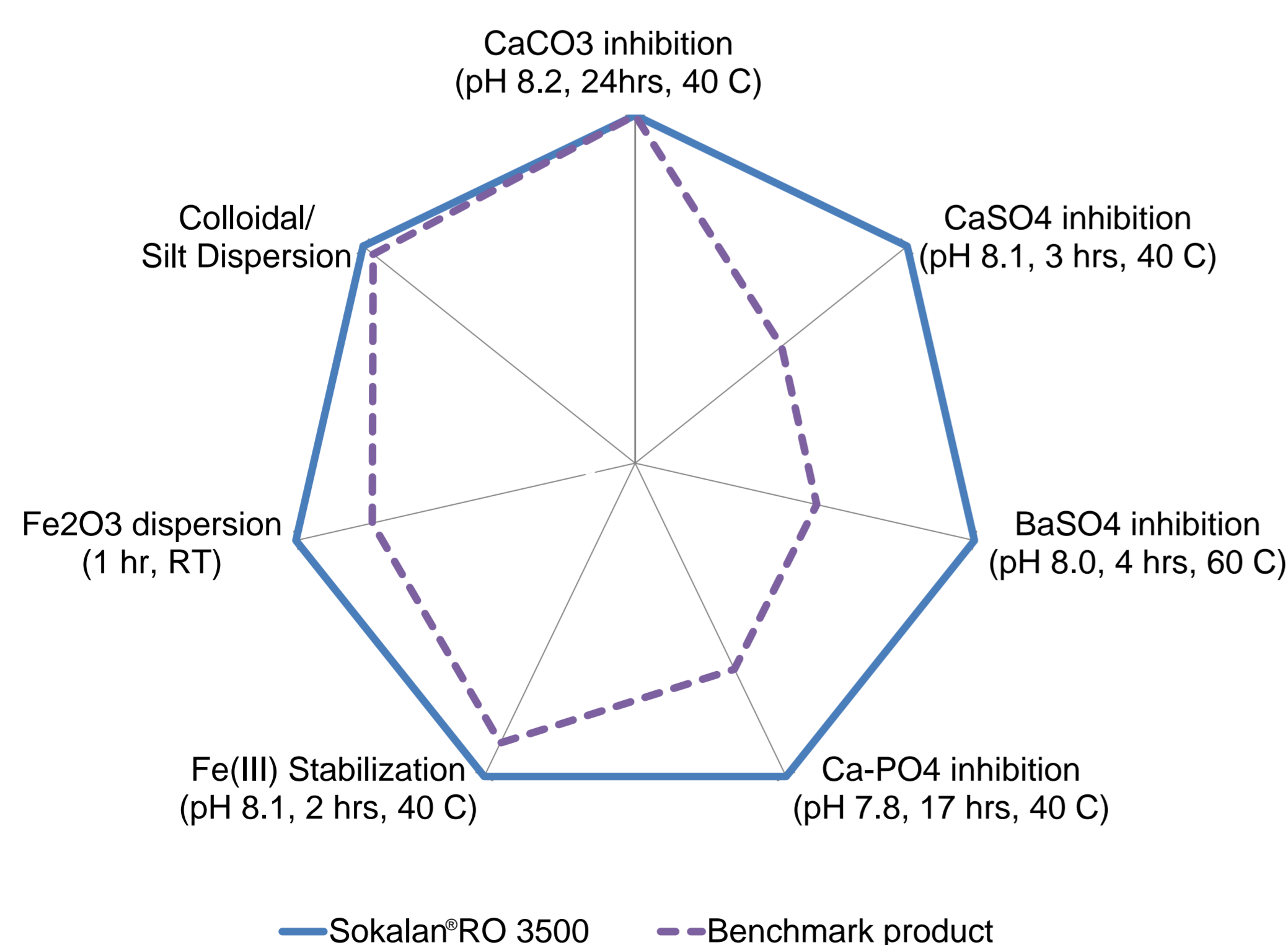
Threshold inhibition



Sokalan® RO 3500 keeps membrane surface free from scaling & fouling – making desalination plants more efficient

Sokalan® RO 3500: the multifunctionality

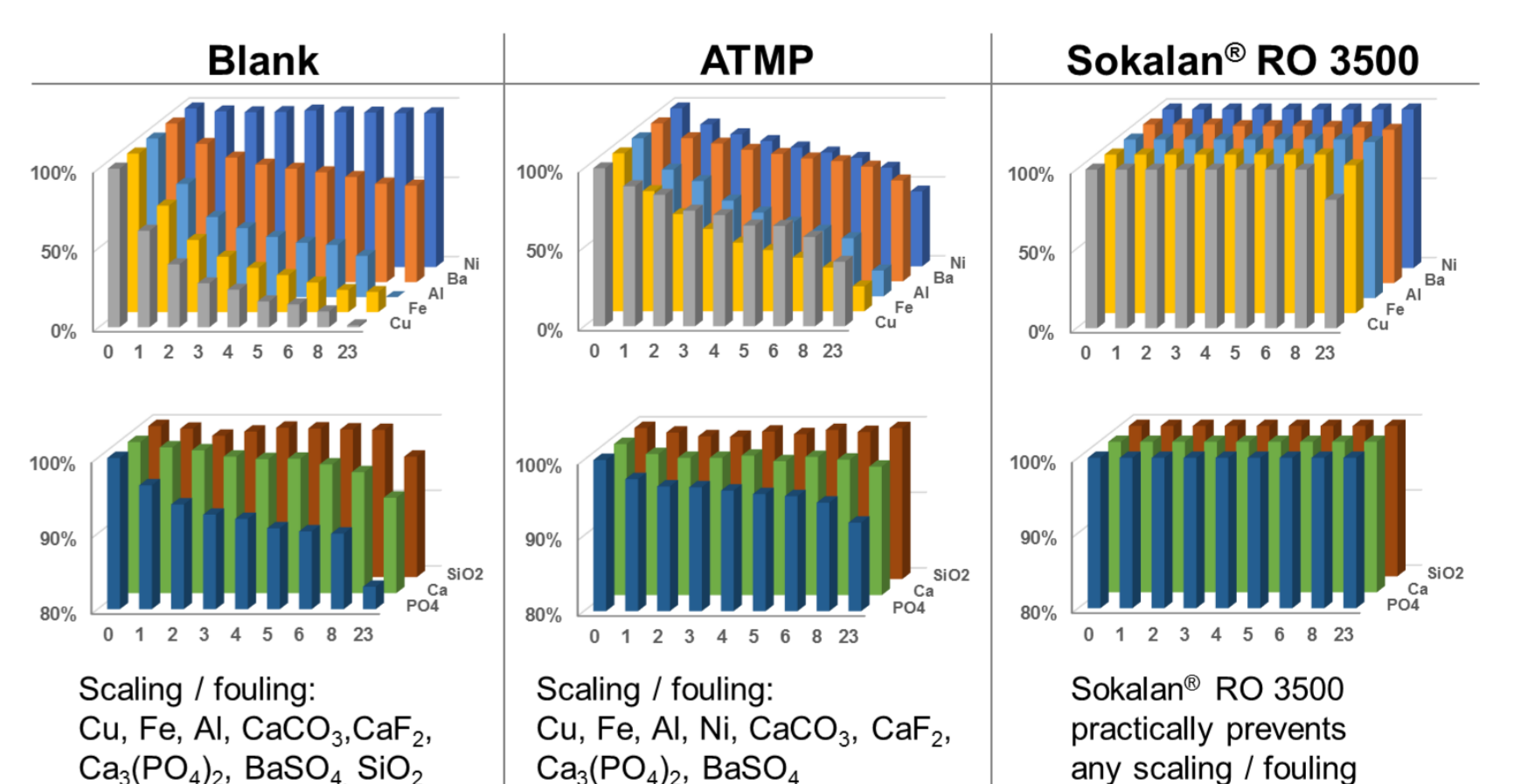
Performance vs. Benchmark



Key benefits

- Very low phosphorus content (< 5 µg P/L vs. 1500 µg P/L for ATMP @ 5 ppm dose & 75% Rec.)
- A multifunctional antiscalant to handle multiple scale potentials
- Outperforms benchmark product in CaSO₄, BaSO₄ & Ca-PO₄ inhibitions, and iron control.
- Performs at the same level as Polymaleate/Phosphonate blend in CaCO₃ inhibition

Laboratory pilot test with synthetic wastewater*



* ICP-AES analysis of the bulk solution simulating a typical RO brine composition of wastewater in Singapore at 74.5% RO recovery.

Sokalan® RO 3500, kept the scaling and fouling forming ions soluble in the super-saturated test solution

