

Improve your
Reverse Osmosis efficiency

ROPUR
antiscalants





ROPUR RPI® Antiscalants

ROPUR RPI® Antiscalants feature superior scale control, dispersant capabilities as well as compatibility with commonly used membranes and chemicals for water treatment applications.

ROPUR RPI® Antiscalants are the product of choice in hundreds of reverse osmosis systems throughout Europe and Middle East, including many large drinking water plants. ROPUR RPI® Antiscalants product range meets the expectations of today's water treatment requirements including NSF, KIWA and Country specific drinking water approvals.

Benefits

ROPUR RPI® Antiscalants are designed to support plant designers, OEM's and end-users to optimize RO, NF, UF and MF plant performance by:

- Optimizing plant recovery/conversion
- Protecting the membranes and investment
- Less Antiscalant/Dispersant(Antifoulant) needed through high product efficacy
- High quality products through ISO 9001 / 14001 certified production
- Available in liquid form for easy handling and dosing
- Stable system performance through combined threshold and antifouling effect
- Drinking water approvals (NSF, KIWA, Country specific)
- Environmentally compatible
- Qualified technical service and support
- Reducing cleaning frequency
- Minimizing system downtime

ROPUR RPI® Antiscalants Table

The performance of ROPUR® RPI Antiscalants is summarized in the following table:

Ratings chart is based on equal concentrations of antiscalant in RO brine

	NSF		KIWA		NSF			
	RPI 2000	RPI 2800	RPI 3000A	RPI 4000A	RPI 4500A	RPI 4900	RPI 5000A	RPI 6000
Feedwater source	BW/SW	SW	BW/SW	BW	BW	BW/SW	BW	BW
CaCO ₃	***	**	***	***	**	***	*	**
CaSO ₄	**	*	***	***	*	***	○	***
BaSO ₄ / SrSO ₄	*	○	***	***	*	**	○	**
SiO ₂	○	○	○	*	*	○	***	*
CaF ₂	○	○	*	*	○	**	○	*
Fouling Inhibition	*	**	*	*	*	○	*	*

*** Excellent ** Very Good * Good ○ Fair ○ Limited * Not Effective

BW = Brackish water
SW = Sea water

Highly effective on poorly soluble Silica (MgSiO₃), resulting in concentrate saturation of up to 250 mg/l.

RPI-6000 only available on special request

Live safer.™



NSF Certified for Use in drinking water application

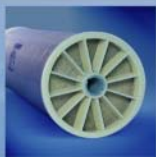
Certified to NSF/ANSI 60

kiwa certified



MEMBER OF TECHNICAL GROUP APPROVE

KIWA Certified for use in drinking water application



How it works...

Scale inhibitors function based on one of the following, closely related mechanisms, in which they interfere with the growth stages:

Threshold effect

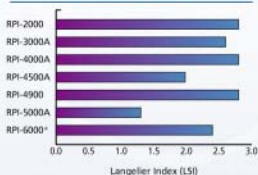
Sub-stoichiometric amounts of the inhibitor prevent the precipitation of salts that have exceeded their solubility product.

Crystal distortion effect

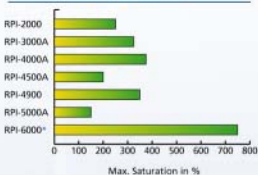
Interference in normal crystal growth produces an irregular crystal structure, resulting in poor scale-forming ability.

Dispersant (antifouling) effect

A single-pole charge is applied to the surface of the crystals, which causes the crystals to repel one another.

Max. LSI (CaCO₃)

* Available only on special request

CaSO₄ Saturation

Customer satisfaction...

"Since we started using the ROPUR RPI® Antiscalants, we do not have any problems of deposits in our plants. We have optimized our costs and were even able to reduce the product dosing.

We are very satisfied with the effectiveness of the ROPUR RPI® Antiscalants and the excellent price/quality ratio. The positive results have also increased the level of satisfaction among our clients."

D. José Juan Falcon Urzua
Ingeniero Técnico
JOSE FALCON SUAREZ, S.A.

"Hidrotec introduced the ROPUR RPI® Antiscalants products in the south-eastern part of Spain, where positive results raised confidence among the end-users. Because of this, we increased our sales efforts and were able to capture a significant market share, as well as reach a strong market position.

The excellent characteristics of the RPI-series inhibitors resulted in overwhelming satisfaction among our clients, and consequently our company could increase profits substantially."

B. León Padilla
MEMOTEC España

Service and Support

Our highly qualified and specialized staff provides our customers with the following added-value service and support:

Selection and Dosing Calculation of Antiscalants

To increase your brackish or seawater reverse osmosis efficiency and support trouble-free operation, we offer an evaluation of water analysis for correct selection and optimized dosing amount of ROPUR RPI® Antiscalants. We even consider your complete pre-treatment phase in order to attain full chemical compatibility.

Analytical Services

In order to choose the most appropriate antiscalant, it is recommended to carry out a thorough and comprehensive water analysis. We can assist you in evaluating the analysis results, which we use as basis for recommending the most appropriate ROPUR RPI® Antiscalant. If needed, we also offer a complete laboratory water analysis.

Membrane Autopsy

Membrane autopsy is a highly valuable service, which is used in determining the reasons for fluctuations or decline in plant performance. The autopsy will reveal if plant performance is affected by specific factors such as fouling, scaling, or physical damage to the membrane itself.

Plant Evaluation

We have a team of specialists who will do on-site inspections of your plant to help you determine if and why your plant is not performing to its fullest capacity.

Pre-treatment and Cleaning Recommendations

Based on the water treatment analysis results and system evaluation, we can provide you with optimal pre-treatment recommendations, which are right for your plant.



Electron microscopy of calcium sulfate (CaSO₄) scaling crystal



ROPUR RPI® Antiscalants

Manufactured in Germany under EN ISO-9001 / 14001 quality standards, ROPUR RPI® Antiscalants are specifically formulated for membrane separation processes used in water treatment applications. With 20 years of application know-how ROPUR RPI® Antiscalants increase your brackish and sea water reverse osmosis system performance and reliability through unmatched efficiency and quality.

Product Availability & Stock Location

To reduce storage costs customers have access to a quick and reliable distribution of ROPUR RPI® Antiscalants through main stock location in Germany or local stock in UAE, Dubai (Jebel Ali Free Zone). Through optimum logistical efficiency we ensure that inventory is available in the right place at the right time. For trouble-free operation, your local ROPUR RPI® Antiscalants distributor also keeps a stock of the most frequently used antiscalant products.

Web site info:

Instant access to technical support and customer service is available 24 hours through the Web site www.ropur.com. The site offers everything from technical bulletins and technical information to direct customer support such as 24 h call-back service.

Authorized Distributor:



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