

KemGuard® – Your scale control solution for membrane separation processes

Kemira

Kemira KemGuard® products for scale control in membrane separation application are designed to efficiently prevent the mineral scale problems encountered in brackish, sea or high dissolved solid content water applications.



As part of a holistic water treatment program, KemGuard antiscalants inhibit the precipitation of mineral based scale like calcium carbonate, calcium sulphate, barium sulphate and silica. Mineral scale can form on the membrane surface in reverse osmosis and other membrane separation processes due to the high salinity or high dissolved solid content in the water. This increases the costs of the plant operations, can reduce the quality and quantity of the permeate and lead to frequent plant shut downs for maintenance.

KemGuard antiscalants effectively prevent the growth of crystals and disperse dissolved matter. The KemGuard product line is compatible with most commonly used membranes and chemicals for water treatment. All the products intended for potable water treatment are certified by NSF or meet UNE or similar local regulations.

Scale control with KemGuard products

Kemira is your partner for a total approach to water treatment and can provide support to optimize the membrane separation processes by preventing precipitation of:

- Calcium and Magnesium Carbonate
- Calcium and Barium Sulphate
- Calcium Fluoride
- Heavy Metals
- Silica

Benefits for the customer

Kemira membrane care program is a combination of application knowhow and high performance products. It enables you to manage the whole water reuse or desalination process from water intake to the post-treatment in an optimized way:

- Protecting the membranes
- Improving recovery
- Reducing cleaning frequency
- Reducing total cost of operations

Product range

Product*	CaCO ₃	CaSO ₄	SrSO ₄ / BaSO ₄	Ca ₃ (PO ₄) ₂	Silica/ Silicates (Al)	Fe	Al	Mn
KG 5802	++	+++	++	-	-	+	-	-
KG 5804	++	+++	++	-	-	+	-	-
KG 5811	++	++	+	-	-	+	-	-
KG 5894	++	+++	++	-	-	+	-	-
KG 5897	++	+++	++	-	-	+	-	-
KG 5826	++	+++	++	-	-	++	+	+
KG 5840	+	+	+	+++	++	+++	+++	+++
KG 5865	+	+	+	++	++	+++	+++	+++
KG 5800	+	-	++	-	-	+++	+++	+++
KG 5876	++	++	++	-	-	+	+	-
KG PA-105	+++	++	+	-	-	++	++	-
KG PA-204	+++	-	-	+	-	+	+	-
KG PB-10211	+++	++	++	-	-	++	++	-
KG PB-20211	+++	++	+	+	-	+	+	-
+++ Excellent		++ Good		+ Fair		- Not recommended/poor		

* Most of the products meet NSF, UNE and regional regulations for use in potable water production

Kemira makes this information available as an accommodation to its customers and it is intended to be solely a guide in customers' evaluation of the products. You must test our products, to determine if they are suitable for your intended uses and applications, as well as from the health, safety and environmental standpoint. You must also instruct your employees, agents, contractors, customers or any third party which may be exposed to the products about all applicable precautions. All information and technical assistance is given without warranty or guarantee and is subject to change without notice. You assume full liability and responsibility for compliance with all information and precautions, and with all laws, statutes, ordinances and regulations of any governmental authority applicable to the processing, transportation, delivery, unloading, discharge, storage, handling, sale and use of each product. Nothing herein shall be construed as a recommendation to use any product in conflict with patents covering any material or its use.

The dosage of the antiscalant is dependent on the water system being treated. Our experts are using a specific software and system surveys to identify the best product based on water analysis and scaling projections.

KemGuard® is a registered trademark of Kemira Oyj or its subsidiaries.

Kemira in brief

Kemira is a global, over two billion euro, water chemistry company that is focused on serving customers in water-intensive industries. The company offers water quality and quantity management that improves customers' energy, water, and raw material efficiency. Kemira's vision is to be a leading water chemistry company.

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