

Flocon® 885

Biodegradable, Phosphorus free, Nitrogen free Antiscalant
for Reverse Osmosis Systems



Patents

BWA Water Additives (BWA) owns or is the licensee of patents and patent applications, which may cover the products and/or uses described in this brochure.

The following are registered trademarks of BWA
Flocon, Drop and Swirl logo.

*Registered US Patent and Trademark Office.

©2011 BWA, All rights reserved.

The information contained in this product sheet is based on data available to BWA Water Additives at the time of publication. While BWA has made every effort to ensure this information is correct, no responsibility can be accepted by BWA for any loss or liability occasioned by any person acting or refraining from acting as a result of the contents of this publication. BWA cannot guarantee that the results described in this information will be achieved by others if BWA has not participated in the testing process. BWA therefore makes no warranty of merchantability or fitness for a particular purpose or any express or implied warranty in respect of this information. This information is intended for use by technically trained personnel at their discretion and risk and is not a substitute for specific professional or technical advice. BWA's liability shall be limited by its standard limitations of liability contained within its standard terms and conditions of sale if BWA makes any sales to you.

© 2011, all rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means or stored in any retrieval system without the prior written permission of BWA Water Additives UK Limited.

BWA Water Additives UK Limited is a private limited company registered in England and Wales at 2 Brightgate Way, Manchester M32 0TB, Registered No. 5657343.

W0811

BWA Water Additives

Europe
2 Brightgate Way, Cobra Court
Stretford, Manchester M32 0TB
United Kingdom
+ 44 161 864 6699
Fax + 44 161 864 6666

BWA Water Additives

Americas
1979 Lakeside Parkway, Suite 925
Tucker, GA 30084
USA
+ 1 678 802 3050
Or 800 600 4523
Fax + 1 678 802 3024

BWA Water Additives

Asia Pacific
60, Robinson Road, #12-01
BEA Building
Singapore 068982
+ 65 9745 3227
Fax + 65 6234 3606

BWA Water Additives

FZE Dubai Branch
Techno Park Jebel Ali
Block B, Level 1, Office 107
PO Box 263164
Dubai, United Arab Emirates
+971 4 880 7336
Fax: +971 4 880 7404



Visit our website at: www.wateradditives.com

Clear solutions for water treatment

Flocon® 885

Biodegradable, Phosphorus free, Nitrogen free Antiscalant for Reverse Osmosis Systems

Product Description

Flocon® 885 is a unique biodegradable, Phosphorus free, Nitrogen free antiscalant for the control of inorganic deposits commonly occurring on the membrane surface of reverse osmosis plants. Benefits include:

- Best Available Biodegradability
- Phosphorus and Nitrogen free chemistry
- Easily monitored in feed water and concentrate using a fluorimeter due to its inherent fluorescence properties
- Excellent control of carbonate and sulfate scales for cost effective operation
- Compatible with all major membranes
- International potable water approvals

Typical Properties

Product specification is available on request.

Appearance	clear amber liquid
pH	8 to 9
Specific gravity at 20/20°C	1.27 to 1.30
Freezing point range	0 to -10 °C

Chemical Reactivity

Flocon® 885 is not affected by chlorine or other oxidizing biocides under normal conditions of use. Flocon® 885 may be used in membrane systems using chlorine and sodium metabisulfite.

Application and Dose Level

Flocon® 885 is a neutralized aqueous solution of a specialized organic acid. There are no special requirements regarding materials of construction or dosing equipment.

The recommended injection point is into the feedwater downstream of any filtration equipment and cartridge filters.

Flocon® 885 is miscible with water in all proportions. It may be applied as the neat product, or as a solution in permeate. A minimum dosing solution strength of 10% w/w is recommended.

Flocon® 885 should be dosed continuously and proportionately to the feed water flow, to maintain the recommended dose level.

The dose level required is dependent on the quality of the feedwater and the saturation indices of the various scales forming species present in the concentrated brine. Proprietary computer software is used to calculate scaling indices and calculate optimum system recovery. Dose level projections and recommendations are available on request.

Antiscalant Properties

- Excellent calcium carbonate inhibitor
- Excellent barium sulfate inhibitor
- Good calcium and strontium sulfate inhibitor
- Good calcium fluoride inhibitor

Handling

Flocon® 885 is certified to ANSI / NSF Standard 60 for use in reverse osmosis systems producing potable water.

Please read the label and Material Safety Data Sheet before handling this product.

Logistics

Classification Non hazardous for conveyance
Non hazardous for supply

Packaging 25 kg (net weight) Plastic Drums
250 kg (net weight) Plastic Drums
1000 kg IBCs/Totes

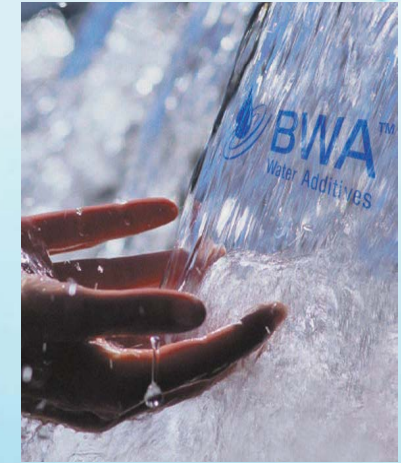


As global awareness of environmentally responsible use of chemicals grows, two areas have risen that are especially important in reverse osmosis applications where the reject concentrate is untreated and returned directly to the ecosystem:

- Limitations on the phosphorus content of effluent.
- The trend toward using more environmentally friendly, biodegradable chemicals.

1. Phosphorus Free Discharge to the Environment

Phosphorus in the discharge from reverse osmosis facilities can contribute to eutrophication of fresh water environments. Eutrophication is a recognized form of pollution which leads to excessive growth of simple algae and plankton. These algal blooms disrupt normal ecosystem functions by reducing oxygen needed for fish to survive, making water cloudy and discolored, and reducing the recreational value of rivers, lakes, and estuaries. More importantly, problems can also occur where eutrophic conditions interfere with drinking water treatment.



As a result, the phosphorus content of effluent has been restricted in many applications and further limitations are being applied, examples including:

- Phosphorus free detergents in several countries world-wide.
- Phosphorus free reverse osmosis chemicals in Florida.
- Restrictions on phosphorus discharge by municipalities and industry into the North American Great Lakes.

2. Biodegradation of Flocon 885

There are two industry accepted standards for measuring biodegradation, the OECD 306 in 28 days (sea water conditions) and the OECD 302b in 28 days (fresh water conditions). Using these tests, Flocon® 885 provides the Best Available Biodegradability on the market today: readily biodegradable in salt water conditions and inherently biodegradable in fresh water conditions.