

# Hypersperse\*

## Antiscalants/Antifoulants

The Hypersperse pretreatment program is designed to significantly reduce scale formation and fouling in membrane systems. The antiscalants are suitable and effectively used in a range of feedwater sources, including brackish, waste and seawater. The use of GE's chemistries improves efficacy against a broad range of scale-forming substances and keeps fouling material in suspension. Common foulants and scalants include calcium carbonate, calcium sulfate, barium sulfate, strontium sulfate, calcium fluoride, iron, colloidal material, silica and other organic contaminants.

Hypersperse MDC series offers protection against scale and colloidal foulants, while the Hypersperse MSI series offers additional control of silica scale.

### Benefits and Features

- Effectively control scales including silica, calcium carbonate, calcium sulfate, barium sulfate, and strontium sulfate
- Compatible with the leading reverse osmosis (RO) and nanofiltration (NF) membranes
- Maintain cleaner membrane surfaces by dispersing particulate foulants
- RO systems can be run at higher recovery rates, which translates to lower operating costs
- Products available with multiple global regulatory approvals
- Non-P products available
- Effective over a wide pH range
- May be fed neat or diluted
- Coagulant compatible products available that can be used with SoliSep\* MPT series products

### Description and Use

Hypersperse antiscalants are highly effective liquid products developed to control scale precipitates and reduce particulate fouling within membrane separation systems.

Excellent results are achieved in membrane separation processes including reverse osmosis, nanofiltration and electrodialysis reversal (EDR).

### Dosing

Typical dosage range is between 0.5 and 4 mg/L. To determine the adequate dose rate for a certain system it is recommended to use the Argo Analyzer\* simulation software. It will provide the appropriate application dosage based on the specific water chemistry and system design.

Argo Analyzer is a tool designed to provide guidance on the best choice of antiscalant treatment for RO systems. This software is very accurate in recommending the best Hypersperse product, the correct dosage and further guidelines for reverse osmosis systems. It also gives information about cleaner selection and cleaning procedures.

Please contact your GE Water & Process Technologies sales representative for details.

### The GE Solution

GE provides a comprehensive solution in projecting scaling potential for major scale-forming ions present in membrane systems. Our package of solutions includes engineering level expertise for antiscalant program optimization, customized solutions and personalized service. Each potential application is evaluated to meet the specific treatment goals of the system.



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