

SpectraGuard™ 311 is an 8x Super Concentrated antiscalant/dispersant that has been proven as a superior pretreatment in RO feed water. SpectraGuard™ 311 is a high performance blended antiscalant/dispersant with broad spectrum scale inhibition. Capable of controlling carbonates, sulfates, phosphates, metal hydroxides, silica and particulates, SpectraGuard™ 311 provides full protection of the membrane system from a multitude of feed waters. SpectraGuard™ 311 can be used in municipal reuse, heavy industrial, drinking water and other high loading applications.

### Features / Benefits

- High performance formula provides best available inorganic scale inhibition
- 8x concentrate significantly reduces freight and inventory requirements
- Using a proprietary blend of polymers and phosphonates this formula provides added control of membrane fouling in waters with high salts, high silica and colloidal foulants
- Higher performance allows for lower dose rates than existing formulations
- Stable molecular structure maintains integrity in high pH, high temperature and high salinity applications
- Classified for use in membrane systems producing drinking water (ANSI/NSF Standard 60)

### Uses

- Control of calcium carbonate, calcium sulfate, barium sulfate, calcium fluoride, silica, and hydroxides of iron and manganese

### Specifications

Appearance	Amber / pale yellow liquid
pH (1% solution)	1.60 – 2.20
Density (kg/liter)	1.26 – 1.31



Certified to NSF/ANSI 60

### Packaging

Pail: 5 gallon/18.9 liter

Tote: 275 gallon/1,040 liter

Drum: 55 gallon/208 liter

Bulk: available upon request

For special packaging options, please contact PWT or your local distributor.

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 LIQUID REVERSE OSMOSIS ANTISCALANT

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## General Mixing & Application Instructions for SpectraGuard™ 311

1. Typical dose rates are 0.25 to 0.75 mg/l
2. Contact Professional Water Technologies™ or your local distributor for custom chemical dosing recommendation

## ProDose XPRT™ – Scaling Prediction Software

ProDose XPRT™ uses the most accurate scaling prediction calculations available to accurately determine effective antiscalant dosage, and cleaning chemical usage. The user can enter multiple cases to study various operating conditions, directly enter concentrate analysis, and select the best PWT product and dosage for the application.

*ProDose XPRT™ is available upon request only. Please contact your PWT representative for more information.*

The screenshot displays the PWT ProDose software interface. At the top, there is a navigation bar with various parameters: UNITS (US), TEMPERATURE (Fahrenheit), PERMEATE FLOW (81.00), RECOVERY (75.0%), ANTISCALANT (SpectraGuard Liquid), DOSAGE (2.95 PPM), SOURCE (Well Water), PROJECT NAME (Project 1), and CASE (1). The main interface is divided into several sections:

- PROJECT INFORMATION:** Includes fields for CLIENT NAME (City of San Diego), PROJECT NAME (Project 1), LOCATION, PREPARED BY, DATE (5/1/2016), and WATER TYPE (Well Water).
- MEASUREMENTS:** Includes PRESET UNITS (CGS, Metric, U.S.), TEMPERATURE (Deg F), FLOW RATES (Gal/min), and MASS UNITS (lb). There is an "Enter" button.
- COMMENTS (OPTIONAL):** A large text area for entering comments.
- TOTAL CASES (1 AVAILABLE):** A table with columns for Cases and Modified Date. The table shows one case with ID 1 and a modified date of 5/27/2016. Below the table is a "Selected Case Description" field.

The interface also features a sidebar with icons for PROJECT INFORMATION, WATER QUALITY, SYSTEM INFORMATION, CHEMICAL SELECTION, CALCULATIONS, and REPORT. At the bottom, there are navigation arrows and a "Max 9" indicator.