



BioGuard™ 111 is an 11x concentrated chemical pretreatment developed to reduce biological cell adhesion to the membrane surface and other ancillary equipment. BioGuard™ 111's ability to effectively disperse biological foulants present in feed waters makes it a great addition to any pretreatment regiment. Ideal for systems plagued with biological fouling issues, BioGuard™ 111 ensures stable performance with superior control of the feed water chemistry.

### Features / Benefits

- 11x concentrate (111) significantly reduces freight and inventory requirements
- Phosphate-free formula reduces negative impact on the environment
- 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

- For use on reverse osmosis (RO) and nano-filtration (NF) membranes
- Can be blended with other pretreatment formulations from Professional Water Technologies™ to reduce chemical dosing equipment

### Specifications

Appearance	Clear liquid
pH	1.60 – 2.60
Density (kg/liter)	1.15 – 1.25

### 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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CONCENTRATED, LIQUID BIO-DISPERSANT

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## General Mixing & Application Instructions for BioGuard™ 111

1. Typical dose rates are 0.18 to 0.56 mg/l.
2. Call 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 the PWT logo and several tabs: 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). Below this is a sidebar with icons for PROJECT INFORMATION, WATER QUALITY, SYSTEM INFORMATION, CHEMICAL SELECTION, CALCULATIONS, and REPORT. The main content area is divided into several sections: OVERVIEW (with fields for CLIENT NAME, PROJECT NAME, LOCATION, PREPARED BY, DATE, and WATER TYPE), MEASUREMENTS (with dropdowns for PRESET UNITS, TEMPERATURE, FLOW RATES, and MASS UNITS), COMMENTS (OPTIONAL) (a text area), and 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 field for Selected Case Description.