

# Pretreat Plus® Gypsum Concentrate

## Membrane System Support Program

Pretreat Plus® Gypsum Concentrate is a highly effective antiscalant, specially formulated for feedwaters with the highest levels of calcium sulfate. It is effective over a wide range of concentrations, and does not flocculate dissolved polymers such as residual coagulants or iron or aluminum-rich silica. Use of this product is recommended for reducing the operating and capital costs of reverse osmosis (RO), nanofiltration (NF) and ultrafiltration (UF) systems. A special utility is in its application as a substitute for pretreatment with ion exchange beds.

### Product Benefits:

- Extremely effective as a threshold inhibitor for calcium sulfate scale.
- Effectively prevents crystallization of calcium sulfate from highly supersaturated brine almost indefinitely.
- Certifiable under ANSI/NSF Standard 60 for drinking water production.
- Compatible with major manufacturer's RO, NF, and UF membranes.
- Does not flocculate dissolved iron/aluminum oxide/silica complexes.
- Effective in controlling calcium carbonate and calcium sulfate scales.
- Effective in feedwaters with pH range 3.0–13.0.
- Can be mixed with all Pretreat Plus and ProTec RO products to boost calcium sulfate control capability.

### SPECIFICATIONS: LIQUID CONCENTRATE

<b>Appearance:</b>	Clear, Colorless to Light Yellow Liquid
<b>pH:</b>	6-8
<b>Specific Gravity:</b>	1.26 ± 0.02

### Application:

*Pretreat Plus® Gypsum Conc. should be injected into the feed-stream prior to the static mixer and cartridge filter. Effective pH range is 3 –13. If frozen, may be thawed and mixed before use. Stability is excellent, but best used within 12 months. Complete and long-term stoppage of calcium sulfate crystallization makes it unique for stabilizing supersaturated brine in storage or passage through distant discharge pipes.*

### Dosing Recommendations:

*In the useful dosage range of 0.05–20 mg/L (neat), control of a wide range of inorganic scales at up to 100 x saturation values or higher of calcium sulfate is possible. By monitoring the concentrate stream and trend charts, optimal dosage can be achieved for the control of scales including that from calcium carbonate, calcium sulfate, barium sulfate, strontium sulfate, iron hydroxide, aluminum hydroxide and silica.*

### Packaging:

*Standard pails, drums, and totes for liquid.*

*\*SDS available upon request at [klt@kingleetechnology.com](mailto:klt@kingleetechnology.com)*

