# UniClean America

## FEATURES AND BENIFITS

- Form: Liquid alkaline membrane cleaning agent.
- Compatibility: Suitable for polyamide thin-film composite and cellulose acetate membranes.
- Activity: High level of active substances for broad-spectrum cleaning efficiency.
- Comprehensive Cleaning: Effectively removes iron oxides, hydroxides, calcium carbonate, organic substances, and microbial slimes.
- Enhanced Performance:

  Maintains high membrane
  efficiency by preventing
  fouling and scaling, ensuring
  consistent water quality and
  production rates.
- Easy Application: Liquid form allows for straightforward application and mixing.
- Versatile Use: Suitable for a wide range of membrane types and contaminants.
- Prolonged Membrane Life:
  Regular use extends the
  lifespan of membranes,
  reducing the need for
  premature replacements and
  unscheduled downtime.
- Cost-Effective: Reduces operational costs by maintaining lower feed pressures and extending membrane run times.

# UCA+ RO ALKALINE CLEANER

#### PRODUCT DESCRIPTION:

Introducing UCA+ RO ALKALINE CLEANER, an advanced liquid alkaline cleaning agent specifically designed for the maintenance and cleaning of reverse osmosis (RO) membranes. This powerful blend of organic and inorganic components is highly effective in removing a variety of fouling agents, including iron oxides, hydroxides, calcium carbonate, organic substances, and microbial slimes. UCA+ RO ALKALINE CLEANER ensures optimal membrane performance, extending system run time and membrane lifespan, while maintaining high water quality and production efficiency.

**APPLICATIONS:** UCA+ RO ALKALINE CLEANER is ideal for use in reverse osmosis systems where membranes are prone to fouling by various contaminants. It supports the removal of acid-insoluble scales such as calcium, barium, and strontium sulphates, as well as traces of calcium fluoride. This cleaner is suitable for polyamide thin-film composite and cellulose acetate membranes.

#### **DIRECTIONS FOR USE:**

### **Preparation:**

- 1. **Solution Mixing:** Prepare the cleaning solution using chlorine-free water to create a 2.0-2.5% solution of UCA+ RO ALKALINE CLEANER.
- 2. **pH Adjustment:** For removing calcium sulphate and calcium fluoride deposits, adjust the cleaning solution to a pH of 9.0-10.0 by adding hydrochloric acid.

#### **Cleaning Procedure:**

- 1. **Monitoring:** Monitor the progress of membrane cleaning by checking for hardness salts in the cleaning solution.
- 2. **Soaking:** For severe scaling, soak the membranes with the cleaning solution for 24 hours or longer if necessary.
- Organic Matter Removal: To remove organic matter or biofilm, add 1-2.0% of high pH
  detergent cleaners to the cleaning solution. Biocides can also be included if bio-fouling
  exists.
- 4. **Flushing:** After cleaning, thoroughly flush the system to ensure all residual products are removed from the membrane surfaces. Continue flushing until the discharge water pH matches the flushing water pH.



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### **Equipment Compatibility:**

• Materials: Use equipment made of stainless steel (304, 316), PE, EPDM, PP, PVC, Hypalon, Vinyl, Viton, Neoprene, Buna-N, Mild Steel, HDPE, or Epoxy phenolic. Avoid using brass or coated steel drums with the neat product.

#### **Safety and Handling:**

- Manufacturer's Guidelines: Always follow the membrane manufacturer's recommendations regarding pH, temperature, flow rate, and differential pressure during cleaning.
- Safety Precautions: Ensure proper ventilation and use appropriate personal protective equipment (PPE) during handling and application.

Why Choose UCA+ RO ALKALINE CLEANER?

UCA+ RO ALKALINE CLEANER offers a superior solution for maintaining and cleaning reverse osmosis membranes. Its advanced formulation ensures thorough removal of various fouling agents, enhancing membrane performance and extending their operational life. By integrating UCA+ RO ALKALINE CLEANER into your maintenance routine, you can achieve optimal system efficiency, reduce operational costs, and ensure consistent high-quality water production.

Experience the exceptional cleaning power and benefits of UCA+ RO ALKALINE CLEANER. Choose UCA+ RO ALKALINE CLEANER for a cleaner, more efficient, and reliable reverse osmosis system.

#### **CRUCIAL NOTICE:**

Unlock the Safety Data Sheets (SDS) for UniClean America's products—your compass for health and safety when handling our chemicals. Before diving into our products, every manager and employee must delve into these sheets to ensure a smooth sail through safe usage.

We are committed to providing precise and dependable information. Nevertheless, it's on you, the user, to wield and employ our product prudently, fully aligned with all laws and regulations. UniClean America and our suppliers don't guarantee any warranties—explicit or implied—pertaining to the product, including its marketability. This product is exclusively offered for your scrutiny and trials. This information does not extend any patents or licenses, either stated or inferred.

