



# TECHNICAL DATA SHEET (TDS)

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## **Product Name: ASHAION® MC 310 AC**

Product Type: Acidic Membrane Cleaner

Application: Reverse Osmosis (RO) Membrane Cleaning

### **Product Description**

ASHAION® MC 310 AC is a high-performance acidic membrane cleaner formulated with a safe blend of organic acids and surfactants. It is specifically designed for effective removal of inorganic mineral scales such as calcium carbonate, iron oxides, and metal hydroxides from Reverse Osmosis (RO), Nano-filtration (NF), and Ultra-filtration (UF) membranes. This formulation is non-aggressive, ensuring prolonged membrane life and consistent system performance.

### **Key Features & Benefits**

- - Effectively removes mineral scale, metal oxides, and deposits from membranes.
- - Safer alternative to aggressive mineral acids like HCl or HNO<sub>3</sub>.
- - Compatible with polyamide and cellulose acetate membrane types.
- - Enhances membrane recovery and flow rates.
- - Environmentally safer and biodegradable components.
- - Non-fuming and safe for operator handling when used as directed.

### **Applications**

- - Reverse Osmosis (RO) systems
- - Nano-filtration (NF) systems
- - Ultra-filtration (UF) systems
- - Industrial and commercial membrane cleaning processes

### **Physical & Chemical Properties**

Parameter	Value
Appearance	Clear to pale yellow liquid
pH (1% solution)	2.5 ± 0.5

Specific Gravity @25°C

1.05 ± 0.05

Solubility

Completely soluble in water

### Usage Guidelines

- Dilution Ratio: 2–5% solution in RO permeate or demineralized water (as per fouling severity).
- Circulation Time: 30–60 minutes at 25–35°C.
- Recommended pH range: Maintain cleaning solution pH between 2–3 for optimal performance.
- Always follow membrane manufacturer guidelines for pH and chemical compatibility.

### Packaging

- 5 kg / 25 kg / 50 kg HDPE carboys or drums
- Custom packing available on request

### Storage & Handling

- Store in a cool, dry, and well-ventilated area away from direct sunlight.
- Keep containers tightly closed when not in use.
- Shelf Life: 12 months from date of manufacture in original sealed containers.

### Safety & Precautions

- Use personal protective equipment (gloves, goggles) during handling.
- Avoid contact with skin and eyes.
- In case of contact, rinse thoroughly with water and seek medical advice if irritation persists.
- Refer to MSDS for complete safety and first-aid guidelines.

### Regulatory Status

- Free from hazardous mineral acids.
- Biodegradable formulation components.
- Compliant with general industrial water treatment chemical regulations.