



TECHNICAL DATA SHEET (TDS)

Product Name: ASHAION® MC 311 AL

Product Type: Membrane Cleaner (Alkaline)

Application: Reverse Osmosis (RO) and Ultrafiltration (UF) Membrane Systems

Product Description

ASHAION® MC 311 AL is a high-performance alkaline membrane cleaner formulated to effectively remove organic foulants, biofilm, and other biological contaminants from reverse osmosis and ultrafiltration membranes. It is suitable for use in a wide range of membrane systems and is compatible with most commonly used membranes.

Key Features & Benefits

- Effectively removes biofilm and organic deposits.
- Enhances membrane life and restores performance.
- Low foaming and easy to rinse formulation.
- Compatible with polyamide and polysulfone membranes.
- Safe for periodic cleaning when used as recommended.

Applications

- RO membrane cleaning in industrial and commercial water treatment systems
- UF system maintenance in food, pharma, and wastewater treatment plants
- Routine or CIP (Clean-in-Place) cleaning cycles

Typical Physical Properties

| Parameter | Value |
|-------------------------|--|
| Appearance | Clear, colorless to pale yellow liquid |
| pH (1% solution) | 11.0 – 12.5 |
| Specific Gravity @ 25°C | 1.05 ± 0.05 |
| Solubility | Completely miscible in water |

Usage Guidelines

- Dilution: 2–5% solution in RO permeate or demineralized water
- Cleaning Temperature: 30–35°C for best results
- Soaking Time: 30–60 minutes, depending on fouling severity
- Circulation: Recommended for effective cleaning
- Rinse Thoroughly: With clean water before system restart
- *Always refer to the membrane manufacturer's guidelines before use.*

Handling & Safety

- Use protective gloves, goggles, and clothing while handling.
- Avoid contact with skin, eyes, and clothing.
- Store in a cool, dry, and well-ventilated area away from acids.
- Refer to the Material Safety Data Sheet (MSDS) for complete safety instructions.

Packaging

5 kg, 25 kg, and 50 kg HDPE containers
(Custom packaging available on request)

Storage & Shelf Life

Store in a tightly sealed container in a shaded area
Shelf life: 12 months from the date of manufacture

Disclaimer

The above data is based on standard laboratory tests and field experience.
Actual performance may vary depending on system design, operating conditions, and fouling type.