



Product Data Sheet

2ndLife RO Membranes



Second Life
Regenerated Membranes



2L-SW8040-T

Regenerated Reverse Osmosis Membranes
for Seawater - Highest Rejection - The Sustainable Solution

Overview

2L-SW8040-T Membranes are regenerated Reverse Osmosis Elements that gain an 'Extra Service Life' in less stringent, secondary applications through a unique refurbishment process. These seawater RO membranes serve various municipal and industrial applications and have been operating in the major utilities around the world.

Key Features

- First in-class regenerated RO membrane to increase the sustainability of water treatment processes and avoid landfill disposals
- Permits lowest system capital cost by using regenerated RO membranes

Key Applications

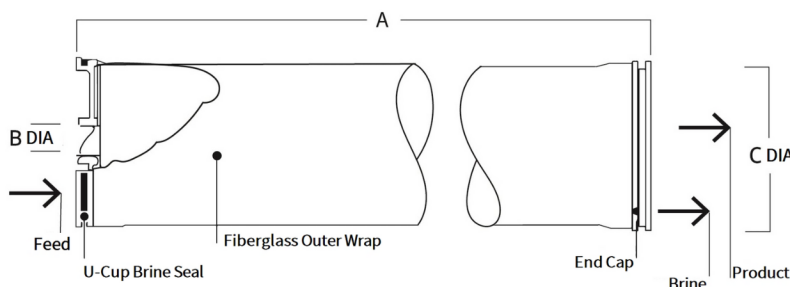
- Seawater treatment for municipal wastewater, agricultural, industrial, mining as well as pulp & paper applications

Typical Membrane Specifications

Permeate Flow Rate, GPD (m ³ /d)	Minimum Salt Rejection, %	Feed Spacer, mil
>5,145 (>19)	>99,3	28

1. The Specified Performance is based on data taken after approximately 30 minutes of operation. Actual testing of elements may be done at conditions which vary from these exact values; in which case, the performance is normalized back to these standard conditions
2. The above benchmark values are based on the following test conditions: 32,000 ppm NaCl, 800 psi (55.5 bar g), 77°F (25°C), pH 8, 8% recovery.
3. Permeate flows for individual elements may vary ± 15%.
4. Note that each regenerated element undergoes rigorous performance testing and quality checks to ensure operational fitness, but may exhibit visual marks of use and slight imperfections in the shell, spacer, or end caps.
5. Sales specifications may vary as design revisions take place.

Membrane Dimensions



1. For element weight information, refer to [What is the weight of 2ndLife RO elements as delivered?](#)
2. For element packing and shipping information, refer to [How are 2ndLife RO elements packaged and shipped?](#)
3. All membrane elements are supplied with a brine seal, interconnector, and O-rings.
4. Packaged elements are enclosed in a sealed polyethylene bag containing less than 1.0% sodium meta-bisulfite solution, and then packaged in a cardboard box.

Dimensions, inches (mm)

A	40.0 (1,016)
B	1.125 ID (28.6 ID)
C	7.89 (200)

ID - Inner Diameter
DIA - Diameter

Suggested Operating Conditions

Membrane Type	Polyamide Thin-FilmComposite
Maximum Operating Temperature	113°F (45°C)
Maximum Operating Pressure	1200 psig (82 bar)
Maximum Element Pressure Drop <ul style="list-style-type: none"> Per element Per pressure vessel (minimum 4 elements) 	20 psig (1.2 bar) 60 psig (4.2 bar)
pH Range <ul style="list-style-type: none"> Continuous Operation 2 Short-term Cleaning (30 min) 4 	2 – 11 1 – 13
Maximum Feed Silt Density Index (SDI)	SDI 5
Free Chlorine Tolerance	< 0.1 ppm

1. For recommended feed and permeate flow rates, flux, and recovery for various feed sources, contact the 2ndLife representative.
2. Maximum temperature for continuous operation above pH 10 is 95°F (35°C).
3. Consult your 2ndLife representative for advice on applications above 95°F (35°C).
4. Refer to 2ndLife Cleaning Guidelines (Form No. 30-D0001-en).
5. Oxidation damage is not covered under warranty, 2ndLife recommends removing residual free chlorine by pretreatment prior to membrane exposure.

Regulatory Note

This product may not be used for drinking water applications or any food or beverage intended for human consumption; please verify the application status before use and sale.

General Information

- Keep elements moist at all times after initial wetting.
- To prevent biological growth during prolonged system shutdowns, it is recommended that membrane elements be immersed in a preservative solution.
- The customer is fully responsible for the effects of incompatible chemicals and lubricants on elements.
- Avoid static permeate-side backpressure at all times.
- Permeate obtained from the first hour of operation should be discarded.
- The use of this product in and of itself does not necessarily guarantee the removal of cysts and pathogens from water.
- Effective cyst and pathogen reduction is dependent on the complete system design and on the operation and maintenance of the system.

Important Information

Please consider good operating practices for the optimal performance of the Reverse Osmosis membrane elements to assure damage free operation:

1. Loading of Pressure Vessels - Preparation & Element Loading (Form No. 30-D0002-en)
2. System Operation, including plant Start-Up Sequence (Form No. 30-D0003-en) and RO Systems Shutdown (Form No. 30-D0004-en)
3. Handling, Preservation, and Storage (Form No. 30-D0005-en)

Disclaimer

All information set forth herein is for informational purposes only. This information is general information and may differ from that based on actual conditions. Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where Second Life RO Manufacturing FZ-LLC is represented. The claims made may not have been approved for use in all countries. Please note that physical properties may vary depending on certain conditions and while operating conditions stated in this document are intended to lengthen product lifespan and/or improve product performance, it will ultimately depend on actual circumstances and is in no event a guarantee of achieving any specific results. Second Life RO Manufacturing FZ-LLC assumes no obligation or liability for the information in this document. References to "Second Life" or the "Company" mean the Second Life RO Manufacturing FZ-LLC legal entity selling the products to Customer unless otherwise expressly noted. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED. No freedom from infringement of any patent or trademark owned by Second Life RO Manufacturing FZ-LLC or others is to be inferred.

Second Life RO Manufacturing FZ-LLC

- 📍 WFZ03-06 | Shed No. 03 | Al Hamra Industrial Zone | Ras Al Khaimah | UAE
- 📧 P.O. Box 86514 | Ras Al Khaimah | United Arab Emirates
- ✉️ hello@2ndLifeRO.com
- ☎️ +971-(0)7 2448033

License No. 5025595 | TRN: 104172879900003

Form No. 2L-SW8040-T_10-D0004-en, Rev. 2
August 2024

