



# NADIR® UP005 P

## Ultrafiltration Membrane

With a nominal molecular weight cut-off (M.W.C.O.) of 5,000 Daltons, NADIR® UP005 flat sheet is a polyethersulfone (PES) membrane that achieves the highest protein rejection in the industry. In these applications, a tighter ultrafiltration membrane is often used to maximize product yield. UP005 flat sheet membrane can be configured in a wide variety of element designs for food, dairy and process separations as well as water purification. UP005 membrane sheet is available in dry flat sheet rolls and is FDA compliant.

### Membrane Characteristics

Membrane Chemistry	Backing Material	Nominal M.W.C.O (Da)	Thickness (µm)
Polyethersulfone (PES)	Polypropylene	5,000	210 - 250

Permeability LMH/bar (GFD/psi) <sup>a</sup>	PVP K17 Retention (%) <sup>b</sup>	pH Range	Chlorine Tolerance <sup>c</sup>
≥ 10.0 (≥ 0.4)	74.0 – 88.0	0.0 – 14.0	200 ppm (sanitization) at pH ≥ 10.5

<sup>a</sup> Test conditions: Clean water, 4 bar (58 psi), 20°C (68°F), crossflow operation. Membrane specifications may change without notice as design revisions occur.

<sup>b</sup> Test conditions: 2% PVP K17, 4 bar (58 psi), 20°C (68°F), crossflow operation.

<sup>c</sup> For daily short term cleaning: maximum 50°C (125°F), 30 min.

### Important Information

**Standard Sizes:** NADIR flat sheet membrane is available in an A4 sample size of 210 mm x 297 mm (8.27 in x 11.69 in) and in a nominal roll size of 150 m x 1016 mm (492 ft x 40.0 in). Custom lengths may be available on request.

**Initial Flush:** MICRODYN-NADIR recommends flushing membrane for 30 minutes and discarding permeate during the flush prior to operation.

**Storage:** Membrane shipped dry should be stored away from direct sunlight in a cool, dry place. Please see *Membrane Storage Guide – Flat Sheet Membrane* (TSG-O-011).

## Solving Unmet Needs with Customized Products



Headquarters  
MICRODYN-NADIR GmbH  
Building D512  
Kasteler Straße 45  
65203 Wiesbaden  
Germany  
info@microdyn-nadir.de  
www.microdyn-nadir.de

USA Office  
MICRODYN-NADIR US, Inc.  
93 South La Patera Lane  
Goleta, CA 93117  
USA  
info@microdyn-nadir.com  
www.microdyn-nadir.com/en  
www.microdyn-nadir.com/trisep

China Office  
MICRODYN-NADIR (Xiamen) Co. Ltd.  
No. 66 Jinting North Road Xinglin  
Xiamen, China 361022  
infochina@microdyn-nadir.com

Singapore Office  
MICRODYN-NADIR Singapore Pte. Ltd.  
18 Tuas Avenue 8  
639233 Singapore  
info@microdyn-nadir.com