

Tubular membrane

66.01 i5

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| | |
|-------------------------------|--------------------------------|
| Type of filtration: | Ultrafiltration |
| Membrane material: | Polyvinylidene fluoride (PVDF) |
| Membrane diameter (internal): | 5.5 mm |



General properties:

- Asymmetric membrane structure
- Inside-out filtration
- Highly efficient hydrophilic tubular membrane
- High permeability
- Excellent anti-fouling characteristics
- High pressure stability
- Excellent chemical resistance
- Optimized for B-SMART® technology

Fields of application:

Industrial wastewater and process stream treatment

- Sludge separation in anaerobic and aerobic membrane bioreactors (MBRs)
- Zero Liquid Discharge (ZLD)
- RO brine treatment
- Water reuse or water recycling
- Protein concentration/separation

Performance characteristics:

| Membrane type: | 66.01 i5 | Notes: |
|---|---------------|----------------|
| Clean water flux [l/m ² ·h· 100 kPa] | approx. 40 | RO water, 25°C |
| Transmembrane pressure [kPa]* | -20 to +800 | |
| Molecular weight cut-off [Da] | 15,000 | |
| pH range of application [-] | 2-10 | at 25°C |
| Max. temperature [°C]* | 60 at 600 kPa | |

* **Note:** the maximum values for pressure and temperature should not be exceeded.










Membrane lifetime is influenced by:

- Operating conditions under normal operation.
- Cleaning, especially regarding the combinations of maximum values of pH, concentration, pressure and temperature.

Chemical resistance

Process chemicals

The chemical resistance of a membrane is strongly dependent on the process conditions. The following ratings are to be taken as general guidelines only.

| | Poorly resistant | Highly resistant |
|--------------------------------|---|------------------|
| Acids (pH > 2) |  | |
| Bases (pH ≤ 10) |  | |
| Oils |  | |
| Aliphatic alcohols |  | |
| Aliphatic hydrocarbons |  | |
| Halogenated hydrocarbons |  | |
| Aromatic hydrocarbons |  | |
| Polar organic solvents |  | |
| Organic esters, ether, ketones |  | |

Cleaning chemicals

Depending on the nature and degree of contamination, membrane cleaning may be carried out using the following chemicals. The membrane lifetime may be reduced when values [placed in brackets] are exceeded.

- Hydrogen peroxide [max. 1000 ppm]
- Sodium hydroxide [pH ≤ 11]
- Nitric acid [pH ≥ 2]
- Phosphoric acid [pH ≥ 2]
- Citric acid
- Oxalic acid
- Enzymes

Membrane storage

See *operation manual*. New membranes can be stored in their original delivered condition for up to two years.

Membrane must be stored dry, well-packed in a cool, frost-free, dark place.

Used membranes must be preserved in a clean state.

See *operation manual*.

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