



# PERVATECH<sup>®</sup>

## Datasheet

# FLAT SHEET PEBA MEMBRANE

Flat sheet PEBA (polyether block amide) membranes have organophilic (hydrophobic) characteristics, which means that the organic constituent of the feed passes preferentially through the membrane.

### MEMBRANE ELEMENT

Geometry	Flat sheet
Dimensions	297 x 210 mm per flat sheet (package of 3 pcs.)
Substrate material	PET
Intermediate layer	Type of PI
Top layer	PEBA

### OPERATIONAL WINDOW

Temperature	Maximum 70 °C (short-term 80 °C)
Pressure	Maximum 5 bar
pH	3-8
Pre-filtration	10 µm cartridge filter

### HANDLING, CLEANING AND STORAGE

#### *Handling*

- Wear clean gloves to prevent contamination with fungi.

#### *Cleaning*

- Clean the element by flushing with water to which a non-ionic detergent (10 ppm KOH) has been added. Alternatively, enzymatic solutions may be used, depending on the feed composition.
- In case of food & additives processing, please contact us for alternatives.

### **Sterilization options**

**Steam**

106-108 °C

**Flushing**

With ethylene oxide or 100 % ethanol

### **Storage**

**Storage before use**

Out of direct sunlight, at room temperature, < 70 % relative humidity

**Storage after use (short-term)**

In a mixture of water and 10-15 % IPA or in a solution of water with 2500 ppm sodium metabisulfite

**Storage after use (long-term)**

In a solution of water with 0.7 % benzalkonium

### **EXAMPLES OF APPLICATIONS WITH FLAT SHEET ORGANOPHILIC (HYDROPHOBIC) PEBA MEMBRANES**

- Recovery or extraction of organics (in biotech or biotech-related food applications) from natural feed streams like fruit juices, wine, beer, coconut oil, essential oils (carvone, limonene) and in combination with fermentation
- Removal of ethyl alcohol (and other alcohols) from wine and beer
- Upgrading of reverse osmosis permeate in juice production
- Combination with bioreactor in production of alcohols (ethanol, IPA, butanol), ABE (acetone, butanol, ethanol), aldehydes, flavor production as well as acid production
- Removal of volatile organic compounds (VOC)

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