

**□ - BASF**

We create chemistry

## Ultrason<sup>®</sup> E for clean and safe water

- High-purity PESU for UF membranes
- High flux with excellent virus and bacteria removal
- Low fouling tendency and easy cleaning



## Ultrason<sup>®</sup> E: high performance polyethersulfone (PESU) for ultrafiltration (UF) membranes

- High flux and excellent pore size control
- High purity material with low content of gels/oligomers
- Excellent chemical resistance (i.e. to water, acids, sodium hypochlorite, caustic soda)
- Applicable over a wide pH range (0 - 13)
- Repeated sterilization possible with superheated steam (134 °C), ethylene oxide,  $\gamma$ -radiation
- Complies with FDA and European standards for food contact (repeated use)

UF membranes made of Ultrason<sup>®</sup> E are used for a wide range of applications covering the whole water distribution line from upstream to downstream.



## Versatile base polymer Ultrason® for membrane applications

Ultrason® is BASF's brand name for polyarylene-sulfones. It encompasses the different product lines Ultrason® S (polysulfone – PSU), Ultrason® E (polyethersulfone – PESU), and Ultrason® P (polyphenylenesulfone – PPSU). Ultrason® is suitable for the production of membranes in a wide range of applications from ultrafiltration (UF) to nanofiltration/reverse osmosis (NF/RO) including gas separation and pervaporation membranes.

The UF membrane producer Pentair, United Kingdom, uses Ultrason® E as membrane material in water production and non-water applications.



### Direct contact

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## At-the-source solution: UF membrane systems for water distribution lines

Possible contamination of pathogenic waterborne bacteria such as legionella and pseudomonas in the water pipe system can lead to serious health issues for the occupants of public buildings like hospitals. With Ultrason® E as base material, a narrow pore size distribution in UF membranes can be achieved. The membranes enable the high throughput production of clean and safe potable water, free of bacteria and fungi, at low pressure in a very efficient way. Other water treatment systems such as reverse osmosis (RO) systems, boilers, ice machines and water coolers benefit from a better water quality.



## Point-of-use solution: UF filters for infection control

The unique filters consist of hollow-fiber UF membranes with microscopic pores made of Ultrason® E. The pores form a very fine filter that reliably retains bacteria or fungi. The filters are suitable for hospitality and medical facilities like hotels and hospitals. They can be employed as point-of-use filtration for easy and reliable protection against waterborne bacteria at the last possible moment before human contact:

- shower head filters
- medical water filters for taps and faucets
- inline filters





**For more information, please visit our website:**

[www.ultrason.basf.com](http://www.ultrason.basf.com)

Parts on pages 1, 3 and 4 with courtesy of Pentair, United Kingdom.

#### **Note**

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