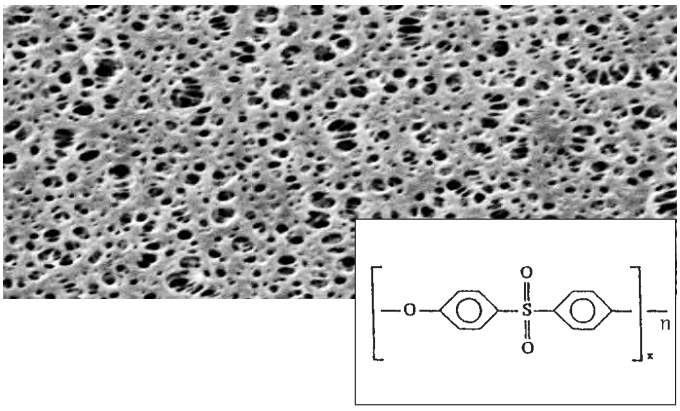
3.4 Polyethersulfone Membranes
Type 15406, 0.45 µm



Description

Polyethersulfone (PES) filters have a high internal porosity. They perform well at high flux with an excellent throughput of aqueous solutions over the entire pH range of 1–14. The low level of extractables from PES membranes makes them suitable for environmental analysis.

Color
White

Material
PES

Reaction to Water
Hydrophilic

Pore Size (Nominal)
0.45 µm

Structure
Symmetric

Applications and Features

Typical Applications
Filtration of biological and pharmaceutical solutions where sterility is not required. Environmental analysis.

Special Features
– Very good chemical compatibility
– Low level of extractables
– Low non-specific protein adsorption

Technical Advantages
– Resistant over pH range 1–14
– Very fast flow rate

Typical Performance

Adsorption
~ 10 µg/cm², non-specific for γ-globulin
< 8 µg/cm² for BSA

Bubble Point with Water (Sartocheck)
2.6 bar | 38 psi

Burst Pressure
0.7 bar | ~ 10 psi

Chemical Compatibility
Resistant to aggressive aqueous solutions, pH 1-14.

Flow Rate for Water per cm²
46 ml/min at Δp = 1 bar | ~ 15 psi

Sterilization Methods
Autoclaving at 121°C or 134°C,
gamma-radiation
ETO sterilization

Thermal Resistance
200°C max.

Thickness (DIN 53105)
Approx. 150 µm

Tests According to USP Standards

Absence of Pyrogens (Endotoxin Content)
Passed

Biological Testing (Plastic Class VI)
Passed

Extractables
Passed test after standard flushing

Particle Release
Passed

Retentive Capacity
100% retention of Serratia marcescens (10^7/cm² filter area)

Order Numbers

25 mm diameter:
15406-025N, pack of 100

47 mm diameter:
15406-047N, pack of 100

50 mm diameter:
15406-050N, pack of 100