

## Researcher41 Green

### Single Use Gamma Irradiated Hollow Fiber Cartridges. Easy and Reliable



The **Researcher Green** crossflow hollow fiber membrane cartridges are designed for pilot scale and small scale production. It is the perfect tool for process development. With a surface area of 1,720 cm<sup>2</sup>, the **Researcher41 Green** can accommodate batch volumes that range from 1,000 ml to 8,000 ml with a typical permeate flow rate of 5.2-10 L/hr for ultrafiltration applications and 3.4-6.9 L/hr for microfiltration applications.

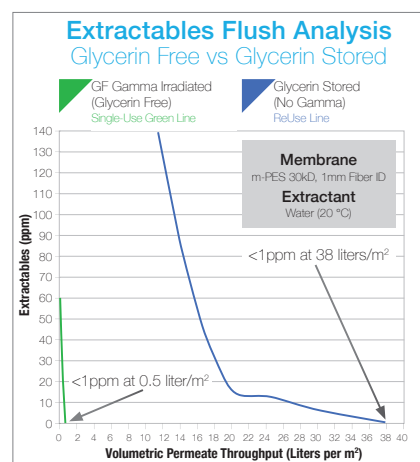
The **Researcher Green** cartridges utilize WaterSep's antifouling, low binding, modified polyethersulfone membrane (m-PES) which provides a process flux and product recovery that exceeds other cross flow devices.

The **Researcher41 Green** hollow fiber cartridges are offered with the same path length as other high performance WaterSep HF cartridges, which makes scale up/scale down easy and predictable.

**Researcher Green** cartridges are also offered as part of fully integrated open architecture single use crossflow assemblies available with pressure sensors, flow meters, pumps, aseptic connectors and/or bags.

The **Researcher41 Green** cartridges offer a true single use crossflow system that provides:

- Significant cost savings over traditional cassette formats.
- Gamma irradiated - ready to use - no rinse.
- No humectants - 80% less extractables. (See [Extractables Flush Analysis](#))
- No time-consuming cleaning validation.
- Reduced risk of cross contamination.
- Consistent membrane performance batch to batch.
- Self-contained – no assembly – no expensive hardware – no membrane installation.
- Every HF cartridge is integrity tested and has an individual lot number for easy traceability.



### TYPICAL APPLICATIONS

- Clarification of mammalian/**CHO cell** cultures and maximizing protein recovery.
- **Cell-harvest.** (Excellent results have been achieved with both *E. Coli* whole cells and *E. Coli* lysates, as well as other microbial process streams.)
- Concentration and purification of **vaccines.**
- Concentration and diafiltration of **gene therapy** products.
- Concentration/diafiltration of **monoclonal antibodies, recombinant proteins, biological macromolecules and peptides.**

## Researcher41 Green

### ORDERING INFORMATION

Place orders online at [www.watersep.net](http://www.watersep.net), or email purchase orders to [orders@watersep.net](mailto:orders@watersep.net), sales order confirmation to follow.

#### Researcher41 Green HF Cartridge

0.5 mm ID\*

SU XXX 05RES41 S3, 3/pkg

SU XXX 05RES41 S6, 6/pkg

\*Not made in 0.65  $\mu$ m

1.0 mm ID

SU XXX 10RES41 S3, 3/pkg

SU XXX 10RES41 S6, 6/pkg

2.0 mm ID\*

SU XXX 20RES41 S3, 3/pkg

SU XXX 20RES41 S6, 6/pkg

\*Not made in 3K, 5K, 30K, 100K, and 0.65  $\mu$ m

Replace XXX with:

003 for 3K      100 for 100K      910 for 0.1  $\mu$ m

005 for 5K      300 for 300K      920 for 0.2  $\mu$ m

010 for 10K      500 for 500K      945 for 0.45  $\mu$ m

030 for 30K      750 for 750K      965 for 0.65  $\mu$ m

050 for 50K

### SPECIFICATIONS

Cartridge Dimensions

0.75" (1.91 cm) x 41.77" (106.10 cm)

Membrane Surface Area

1.88 ft<sup>2</sup> (1,720 cm<sup>2</sup>)

Molecular Weight Cut-off

3K, 5K, 10K, 30K, 50K, 100K, 300K, 500K, 750K

Membrane Pore Size

0.1  $\mu$ m, 0.2  $\mu$ m and 0.45  $\mu$ m, 0.65  $\mu$ m

Fiber ID

0.5 mm, 1.0 mm, 2.0 mm

### MATERIALS OF CONSTRUCTION

The cartridge as assembled is USP Class VI compliant.

Membrane

Modified Polyethersulfone (m-PES)

Housing

White Polysulfone

Encapsulant

Epoxy

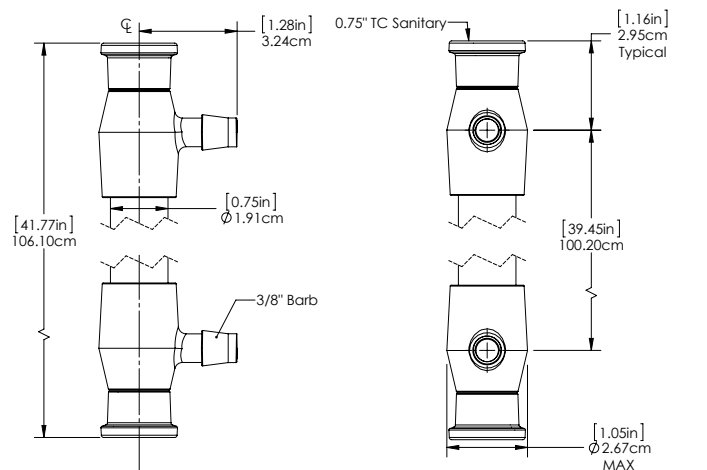
### CONNECTIONS

Feed/Retentate

0.75" TC Sanitary Fitting

Permeate

3/8" Barb



Technical Support: [experttalk@watersep.net](mailto:experttalk@watersep.net)  
or call 508.970.0089 x 204.