

**R Protection from waterborne illness is available for both municipal and private water treatment systems by using Rosedale's Giardia Filtration system.**

Most Americans take safe, contaminant-free drinking water for granted. Yet waterborne disease outbreaks do occur with most directly related to contaminated surface water or groundwater with surface water sources. Violations of the Safe Drinking Water Act affect millions of Americans through water provided to the public in restaurants, hotels, campgrounds and, of course, our homes from our municipal water system.



One public health hazard associated with the organism, *Giardia lamblia*, is giardiasis. This disease causes diarrhea, abdominal cramps, nausea, occasional vomiting, and low-grade fever. Surface water is exposed to contamination by *Giardia* from sewage and animal wastes.

Additional organisms, such as *Cryptosporidium*, threaten our water supplies and produce diseases with serious symptoms. Particularly at risk, are the very young, the aged, and the immunologically-challenged.

The federal government has provided the Surface Water Treatment Rule (SWTR), which specifically requires the control of *Giardia* in public water supply systems. The SWTR establishes performance criteria for water treatment to ensure a 99.9 percent reduction of *Giardia* in water supplies.



NSF-Rated Giardia Filtration System

**Rosedale, with its impressive history of developing filtration products that meet many specialized applications, offers the Giardia Lamblia Reduction Filter system for removing harmful organisms from drinking water systems and is approved in Alaska, California, Washington, Oregon, Vermont, Maine, and Minnesota.**

Rosedale has developed a long-lasting, effective water filtration system that meets the SWTR and protocols for most states. This system offers a dual-stage design that filters out debris and larger contaminants before filtering out disease-producing microorganisms. This extends the life of the element that filters out the Giardia and Cryptosporidium.

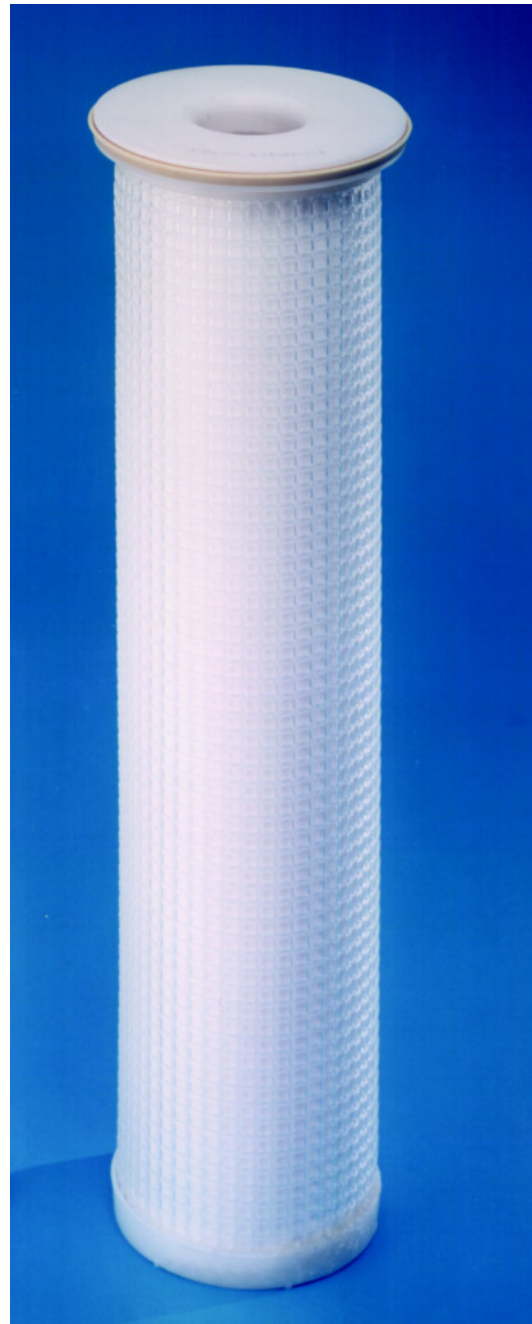
The system consists of two high-quality Rosedale Model 8 housings (pressure vessels), placed in series rated to NSF 61. The first stage is a pre-filter, fitted

with a nine-layer Graded-Density (GD) bag, which filters out debris and larger waterborne biological contaminants. The second stage is Rosedale's Giardia

Reduction bag (GLR) that polishes to 3 microns, effectively reducing Giardia and other disease-producing microorganisms by 99.95 percent.



The optimum flow rate for the system described is 10 gallons per minute (GPM). A single filter housing with a GLR bag can filter up to 20 GPM. Rosedale manufactures filtration systems for commercial, industrial, and large municipal applications, that can filter water up to 500 GPM. Multiple designs are available to meet your needs.





**Rosedale Products' Giardia Lamblia Reduction system provides easy installation, operation, and maintenance for a cost-effective solution to water treatment not previously realized by high-cost conventional systems.**

Rosedale's process is a two-stage series filtration system that is simple to install. The system provides two-inch connections making any common two-inch pipe compatible.

### **Features**

- Low pressure drops
- Permanently piped housing
- Covers are O-ring sealed
- Stainless steel construction
- All housings are electropolished to resist adhesion of dirt and scale
- Easy to clean!
- High-capacity polypropylene bag

The system is designed for ease and simplicity of operation. Changing filter media is as simple as releasing water pressure (or rerouting water flow) and replacing the filter bag. Rosedale's system is equipped with pressure gauges that assist in determining filter bag change-out.

This simple-to-maintain and operate design features electropolished 304 stainless steel to resist dirt and scale buildup. Housings are permanently piped and covers are O-ring sealed.

The Rosedale Giardia Lamblia reduction system meets or exceeds the same turbidity performance criteria as slow sand filtration – the standard for evaluation by many states! The Rosedale system, when combined with disinfection, consistently achieved a 3 log reduction of Giardia – meeting the SWTR and NSF 61, the standard for cyst and turbidity reduction (99.95% reduction).

**Rosedale's Giardia Lamblia Reduction System offers high efficiency and long life through the effectiveness and quality of its materials and construction.**

All graded-density bags are constructed of nine-layers of polypropylene micro fibers and standard fibers that are variably calendered. Heavy-duty handles are sewn and turned inside out to avoid leakage and enhance their pressure capacities.

The Rosedale Giardia lamblia reduction bag has 26 layers of high-efficiency polypropylene micro fiber material, encased in a rigid support cage, to filter out contaminants. The initial layers are pre-Giardia filtration levels, while the next several layers filter the Giardia pathogen itself. The final barriers prevent any material from migrating into the effluent. All GLR bags have a polypropylene top and a specially designed sealing gasket to assure a bypass-proof seal inside the filter housing. All seams and joints on the bag are precision sealed with food-grade adhesives to prevent leakage. The inside-out flow design traps contaminants on the inside of the bag, reducing the possibility of downstream contamination and simplifying the service process.



# R How To Order

Build an ordering code as shown in the example.

## Giardia Lamblia Filter System

**Example:** **GFS - 8 - 30 - 2P - 2 - 150 - S - E - S - PB - B**

	<b>Housing</b>	<b>Options</b>	<b>Bags</b>
<b>Giardia Filtration System</b>	= <b>GFS</b>		
<b>Model No.</b>	= <b>8</b>		
Model 8 (Models 16-48 also available)			
<b>Basket Depth</b>	= <b>30</b>		
30 inch			
<b>Pipe Size NPT and Flanged</b>			
2-in. female NPT	= <b>2 P</b>		
2-in. ANSI flange	= <b>2 F</b>		
<b>Outlet Style</b>			
Bottom	= <b>1</b>		
Side	= <b>2</b>		
Bottom	= <b>3</b>		
<b>Pressure Rating</b>			
150 psi (flanged)	= <b>150</b>		
<b>Housing Material</b>			
304 Stainless steel	= <b>S</b>		
<b>Cover Seal</b>			
Ethylene Propylene (NSF)	= <b>E</b>		
<b>Basket Seal</b>			
Seal Required	= <b>S</b>		
<b>Basket Type</b>			
Filter Bag Basket	= <b>PB</b>		
<b>Filter Elements</b>			
1 GDP0523 and 1 GLRPO8252	= <b>B</b>		

## Graded-Density Filter Bags

**Example:** **GD - PO - 523 - 2**

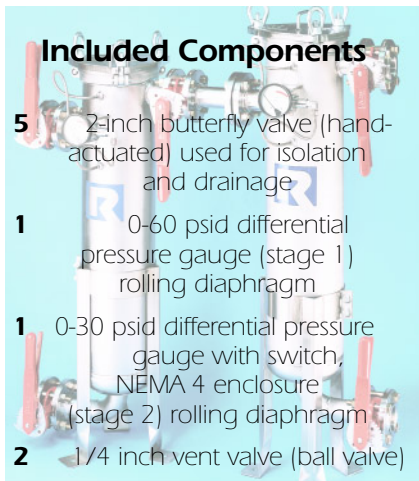
<b>Graded Density = GD</b>	
<b>Fiber</b>	
Polypropylene	= <b>PO</b>
<b>Micron Ratings (95%)</b>	
1.0 Micron	= <b>523</b>
3.0 Microns	= <b>525</b>
8.0 Microns	= <b>527</b>
19.0 Microns	= <b>529</b>
<b>Bag Size (nominal in inches)</b>	
Dia. x Length	Symbol
7-1/16 x 32	= <b>2</b>

## Giardia Lamblia Filter Bags

**Example:** **GLR - PO - 825 - 2**

<b>Giardia Lamblia Removal = GLR</b>	
<b>Fiber</b>	
Polypropylene	= <b>PO</b>
<b>Micron Ratings (99.95%)</b>	
3.0 Microns	= <b>825</b>
<b>Bag Size (nominal in inches)</b>	
Dia. x Length	Symbol
7 x 28	= <b>2</b>

### Included Components



- 5** 2-inch butterfly valve (hand-actuated) used for isolation and drainage
- 1** 0-60 psid differential pressure gauge (stage 1) rolling diaphragm
- 1** 0-30 psid differential pressure gauge with switch, NEMA 4 enclosure (stage 2) rolling diaphragm
- 2** 1/4 inch vent valve (ball valve)

