



## **ProCleanse™ Frequently Asked Questions**

### **What is the history of ProCleanse?**

ProCleanse, LLC is a subsidiary of a technology-driven company that has been a leader in its industries for more than 40 years in the business of soil modification, erosion & sediment control and water management.

### **How long have ProCleanse filtration devices been around?**

Various water filtration devices have been used in the market for decades. The ProCleanse Water Filtration process is new and unique as it is the first to combine the proven technologies of granular media filtration and biocidal ion exchange into a single unit. The filtration/deactivation process was developed through extensive research and laboratory testing and is based upon a strong foundation of science. The entire filtration process takes place in a device that is durable yet lightweight for transportation, requires no energy or chemical additives and is effective on the first day of use.

### **How soon is the device ready for use?**

After the device has been charged with approximately 19 liters (5 gallons) to establish a water table, the user will need to process an additional 50 liters (13 gallons) through the device to rinse the fine particles from the filter media and then the device is ready for use.

**What is the material used for filtration in the device?**

The ProCleanse filter features a proprietary blend of porous ceramic filtration media which provides for bioremediation through entrapment and deactivation of pathogens via ion exchange.

**What are porous ceramic particles?**

The raw material is a unique clay soil that has been screened to a specific size, and kiln-fired, turning the clay into stable ceramic particles. These particles do not break down over time, and are highly porous which enhance the filtration and entrapment mechanisms of the bioremediation process that occurs within the filtration device.

**How long will the device last?**

ProCleanse filters are designed to functional 10 years or longer based on the biocidal capacity of the unit. As water moves through the device, the ion exchange activity that takes place through the biocidal chamber gradually reduces the number of effective biocidal cations. Even when the biocidal capability eventually loses its effectiveness, the device continues to fully operate as a traditional bioremediation unit.

**Will it be possible to tell when the device has reached its limits on effectiveness?**

We recommend replacing the unit after the 10<sup>th</sup> year of use in the field to ensure a continued factor of safety and effectiveness of the biocidal chamber.

**What kind of maintenance is required for the device?**

As water is poured into the device, sediment will become trapped in the top layer of the first chamber, causing a gradual reduction in the rate of flow through the device. Once the flow has slowed noticeably remove the debris strainer and stir the water in the unit to displace the sediment so it can be removed with a cup and discarded. This will allow for an increase in

the water flow again. Following maintenance, the device is immediately ready for use. This maintenance practice will help maintain the flow rate through the life of the device. Frequency of maintenance will be dictated by the turbidity of the input water and indicated by a reduction in the flow rate.

### **How does water move through the device?**

The unit must initially be charged with approximately 19 L (5 gal.) of water in order to establish a water table. As additional water is added to the device, gravity will push water through the pipes to be stored in the safe water chamber.

### **How much does the unit cost?**

Please check with ProCleanse for the current container and pallet pricing. This information can be obtained by contacting ProCleanse at [info@procleansefilters.com](mailto:info@procleansefilters.com)

### **What do I get for the cost of the unit?**

For a cost of less than \$0.001 cents per liter over the 10 year life of the unit, the device will generate enough water to sufficiently provide water for cooking, cleaning, and drinking for a family of six.

### **When is the device available?**

Devices will typically be ready for shipment within one month from the date of order placement.

### **What additional information do you have on testing?**

More information is available from ProCleanse. This information can be requested by contacting ProCleanse at [info@procleansefilters.com](mailto:info@procleansefilters.com)

**How much does a filter weigh?**

The filter weighs less than 40 lb (18 kg) when it arrives for use.

**How much clean water does the unit produce per day?**

The output flow rate is dependent on how much water the user pours into the device. Output can range between 4 – 10 liters/hour (1 – 2.6 gallons/hour) but will typically range between 5 – 7 liters/hour (1.3 – 1.8 gallons/hour). The safe storage chamber will hold approximately 18 liters of water for immediate use.

**What do I do with the unit when it is done working?**

The unit is filled primarily with a porous ceramic particle which can be mixed into the local garden as a soil amendment to aid in moisture management and plant nutrient management. The empty container can be used for storage purposes.

**How many units come on a pallet?**

For container order quantities, 36 units are on a pallet or 720 units within a standard shipping container. For pallet order quantities, 27 units are on a pallet.

**Where do you have units?**

Units are in use in Africa, Central and South America, the Caribbean and Asia.

**Do I need to use chemicals?**

No chemicals are required to be added to the water or the device.

**Do I need to replace the filter media?**

The filter media does not need to be replaced.

**Can I buy the filter media separately?**

Not at this time.

**How does the unit compare to my bio-sand filter?**

Please review our comparison chart.

**Where can I get a unit for my camp/home/farm/emergency shelter?**

We are currently not selling the device in the United States.