Glass Media

Fresh or Saltwater Superior Filtration

Technical Data

- **Specific Gravity**
  2.50
- **Bulk Density**
  75 to 80 lbs/cu.ft.
- **Effective Size**
  Ranges from 0.30 to 1.10 mm
- **Coefficient of Uniformity**
  Ranges from 1.45 to 1.80
- **Estimated Sphericity**
  Approximately 0.40
- **Porosity**
  Typically 48%
- **Shape**
  Angular to sub-angular
- **Permeability**
  VF25 typically 4.0 X 10-l cm/sec
- **Physical Composition**
  Amorphous soda-lime glass
- **Typical Chemical Composition**
  SiO_2 .....73%
  Na_2O 14%
  CaO 10%
  MgO .....<1%
  Al_2O_3 ..... <1%
  SO_3 .....<1%

Packaging

- 50 lbs/240 kg plastic bag
- 40×50 lbs bags = 1 pallet
- 800×50 lbs bags =
  1 truck/1 container

For Use in Residential, Commercial, Industrial, and Environmental Applications

ECOsmarte® glass is made from 100% recycled glass. It is crushed, dried at 250 degrees Fahrenheit, and screened into various sized fractions to achieve optimal filtration properties.

As the grains are nearly all angular in shape and have a fairly high degree of sphericity, the filter bed tends to have more opened packing resulting in better permeability than a filter of spherical silica grains.

Because glass is amorphous and has no internal crystal structure, the particles are homogenous and have no grain boundaries. This gives glass more resistance to breakdown through filtration backwashing cycles.

Furthermore the lack of grain boundaries minimizes cracks where bacteria can lodge and resist flushing in back washing.

Glass particles have a slight negative charge on their surface, which tend to hold onto fine particles during the filtration cycle. Upon back washing, this weak charge releases these fine particles to the effluent thereby contributing to better filtration action. There is less water to the better permeability of a glass filter.

As crushed glass is lighter than silica sand, between 15 and 20% less glass is needed to fill a filtration unit. With the better filtration characteristics and lower density glass is a superior filtration media for many filtration applications. It can be used in swimming pool and spa filters as well. Glass filter media is now being used in storm water runoff filtration systems as a replacement for silica sand. Using glass not only results in good performance, but in real cost benefits over the life of a filter bed.

INSTALLATION INSTRUCTIONS

1. Remove tank cover. Cover the exposed vertical pipe.

2. Remove the sand; use of wet vacuum is helpful.

3. Check all piping or correct fit and defects. Cover laterals w/pea gravel or glass bead base.

4. Add balance of fine glass media. Put back the tank cover and introduce water.

5. Backwash until water is clear; much less time than sand or ZEOlite.

TOLL FREE SUPPORT AT 1-800-ION-SWIM
Video Testimonials at www.ecosmarte.com