

# GLASS PEARLS

## Superior filter media

Waterco's Glass Pearls deliver outstanding water clarity.



[www.waterco.com.au](http://www.waterco.com.au)

Purity. Safety. Clarity.



**Waterco's Glass Pearls are manufactured from 100% pure glass and offer much finer filtration than conventional filter media.**



### **SUPERIOR PURITY**

Whereas other filter media may contain a variety of contaminants, Waterco's Glass Pearls are chemically inert for superior purity. In fact, Glass Pearls have been independently lab tested for leaching contaminants and found to be well within Australian Drinking Water Guidelines.

Their superior purity greatly reduces its initial backwashing requirements, prior to commissioning a filter, enabling a rapid start up of media filters.

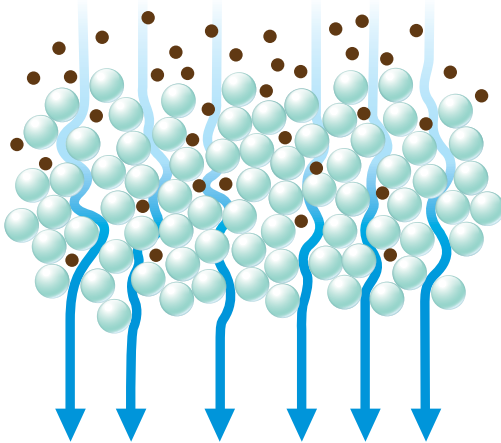


### **SAFE**

Glass Pearls are safe to handle & safe to service in comparison to other glass media options as crushed glass. Glass Pearls are spherical and do not have sharp edges, making them really safe to use. And if there's ever a failure, of the filter's laterals and Glass Pearls flow into the swimming pool, they pose no risk of injury to swimmers.

## SUPERIOR DEPTH FILTRATION

Glass Pearls operate on the basis of “depth filtration”; dirt is driven through the filter bed and trapped in minute spaces between the particles of filter media allowing the cleansed water to pass through.



Conventional media such as sand is crushed and sieved; they generally have an irregular structure and a larger variation in particle size. A conventional media filter bed is more porous and unable to trap fine particles.



Glass Pearls are man-made to specific geometrical shapes providing an extremely narrow particle size range of 0.6mm to 0.8mm, enabling the creation of a dense homogeneous filter media bed, capable of filtering particles down to 3 microns. A micron is equivalent to one millionth of a metre.



Glass Pearl Media



Sand Media

### BULK DENSITY

The chart below demonstrates that Glass Pearls have a higher bulk density than crushed glass and sand.

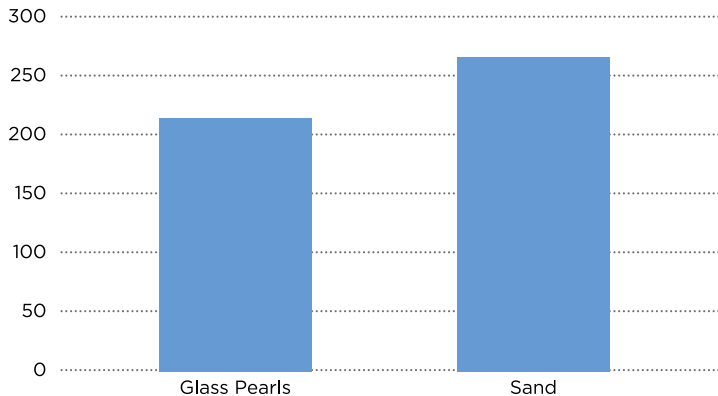
Media	Bulk density, g/cm <sup>3</sup>
Glass Pearls	1.61
Sand	1.47
Crushed Glass	1.33

Bulk density is a measure of mass per volume.

## SAVE WATER

The water saving ability of Glass Pearls are due to their spherical smooth shape, as this result in a low coefficient of friction. After each backwash, Glass Pearls are effectively cleansed of their trapped contaminants.

Glass Pearls require up to 20% less backwash water than sand, saving time and water.



Glass Pearls required 215 litres to successfully backwash a Waterco S600 Media Filter, whereas sand required 266 litres.

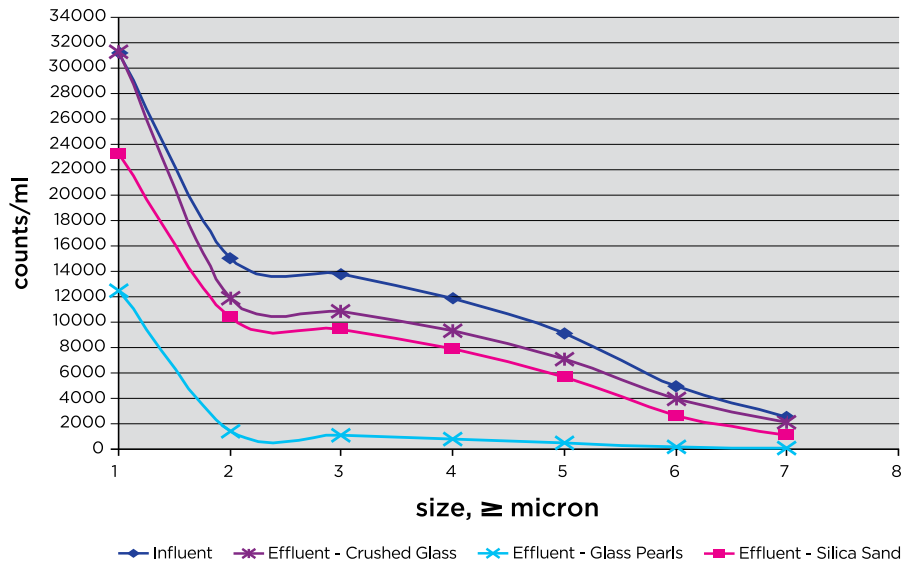




Waterco Glass Pearls have been evaluated by TUV SUD PSB and are suitable for both domestic and commercial swimming pools, aquaculture, water treatment and industrial applications.

TUV test reports can be made available upon request.

### Particle Count Comparison



### Technical Specifications

Filtration Media	Glass Pearl
Effective Size (mm)	0.61
Uniformity Coefficient	1.21
Bulk Density	1.61
Mohs Hardness	7.0

### Chemical Compositions

Silicon dioxide (SiO <sub>2</sub> )	70.00 - 75.00%
Sodium oxide (Na <sub>2</sub> O)	12.00 - 15.00%
Calcium oxide (CaO)	7.00 - 12.00%
Magnesium oxide (MgO)	approx. 5.00%
Aluminium oxide (AL <sub>2</sub> O <sub>3</sub> )	approx. 2.50%
Potassium oxide (K <sub>2</sub> O)	approx. 1.50%

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Waterco's head office is situated in Sydney, Australia with international offices, manufacturing plants and warehouses located in Australia, New Zealand, Malaysia, Indonesia, Singapore, China, the US, Canada, France and the UK.

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