

# DGS

DRYDEN AQUA GLASS SAND

DRYDEN  
AQUA  
DISTRIBUTION

SUSTAINABLE  
WATER  
QUALITY

## REPLACES SAND IN ALL TYPES OF SAND FILTERS!



### PRODUCT FEATURES



Made from 100% recycled glass sourced locally



Improves the performance of all sand filters



Reduces the formation of biofilm in the filter bed



Safe product manufactured under ISO9001-2015 standards

### WHAT IS DGS ?

DGS is a filtration media made from 100% recycled glass in Dryden Aqua's ultra-sophisticated glass factories. In contrast to AFM®, DGS is made from mixed glass and it is not subjected to any activation process. Nevertheless, DGS allows ultra-fine purely mechanical filtration while suffering a lot less from bacterial clogging than sand. Like AFM®, DGS is produced in strict compliance to ISO specifications and undergoes a unique washing process using 100% rainwater to become **the best, safest and purest non-activated glass media on the market.**

### YOUR BENEFITS

- ▶ **Clearer water and reduced chemical consumption:** DGS removes up to 30% more particles than sand.
- ▶ **Less chlorine smells:** DGS reduces the formation of trichloramines in the filter for a healthier atmosphere in swimming pools.
- ▶ **Less backwash water:** DGS needs shorter and slower backwashes than sand (240 seconds to evacuate 99% of retained particles at 45 m/hr)
- ▶ **Stable performance and longer lifespan:** DGS has less efficiency loss over a complete filtration cycle and 2 times greater longevity than sand.



Dryden Aqua factory - Switzerland



## DGS PHYSICAL SPECIFICATION

Particle size Grade 1	0.3 - 1.0 mm
Particle size Grade 2	0.8 - 2.5 mm
Bulk bed density	1,25kg/l
Loose organics	95g/ton
Ferrous metal	13g/ton

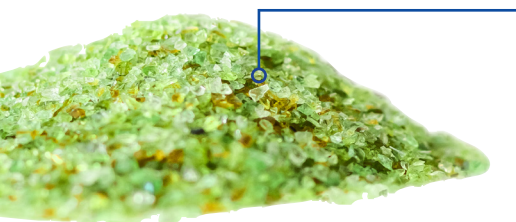
Hardness	> 7 mohs
Sphericity	0.79
Effective size	0.40
Uniformity coefficient	< 1.85
Aspect ratio	2 - 2.4



## The safest & purest generic filter media

The glass is washed using 100% rainwater, decontaminated and carefully broken to the appropriate particle shape and size. Above all we make sure no dangerous glass splinters can get into the filter material and that the organic load is **below 100g per ton**. Other glass media have a contamination between 500g and 10'000g per ton.

**The same price as other glass sand on the market, but a higher quality!**



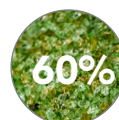
## Granulometry and layering

Use **60% of DGS Grade 1** and **40% of DGS Grade 2**.

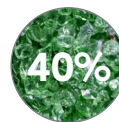
15% less DGS compared to sand is required due to the difference in specific weight. Bulk bed density = 1'250 kg/m<sup>3</sup>.

**For example:** To replace 200kg of sand you will only need 170kg of DGS.  
Top layer: DGS Grade 1 (grain size 0.3 to 1.0 mm) = 100 kg (60%)  
Bottom layer: DGS Grade 2 (grain size 0.8 to 2.5 mm) = 70 kg (40%)

**GRADE 1**  
0.3 - 1.0 mm



**GRADE 2**  
0.8 - 2.5 mm



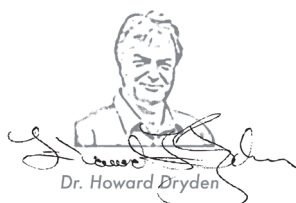
## Operating criteria

**Recommended filtration rate:** 20-50 m/h, ideal < 30 m/h

**Recommended backwash rate:** 30-50 m/h, ideal > 40 m/h

## Packaging

DGS is supplied in bags of 25kg or 1000 kg big bags.



## Who is Dryden Aqua?

Dryden Aqua is one of the largest manufacturers of glass filtration media. As marine biologists, we have a unique knowledge combination and detailed understanding of the biological as well as the physio-chemical reactions in water. This has enabled us to develop and manufacture a highly innovative range of products. We are proud to provide sustainable and cost-effective solutions for the drinking & waste water industry, for aquaria and aquatic life support systems as well as for swimming pools worldwide.