

1 Description.

Active Clear Glass is a vitreous composite made from 100% recycled glass, which has been designed as an advanced filtration medium as a direct substitute for silica sand in water treatment filters.

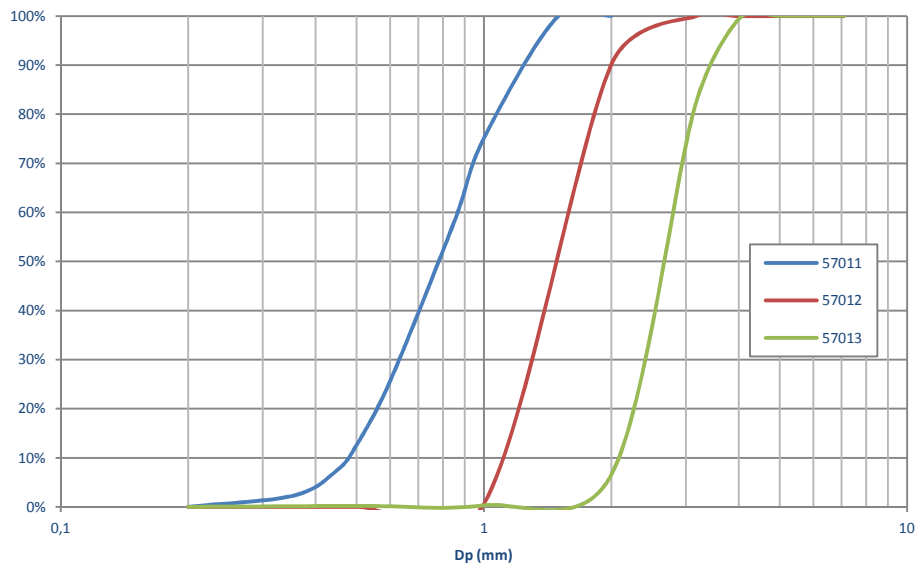
2 Appearance



3 Technical features

3.1 Granulometry and density

Item	57011	57012	57013
Grade	Grade 1 - Fine	Grade 2 - Medium	Grade 3 - Coarse
Effective size, d10 (mm)	0,45	1,1	2,3
Uniformity coefficient, d60/d10	1,7 - 1,9	1,7 - 1,9	1,3 - 1,5
Specific density (kg/m ³)	2.500	2.500	2.500
Apparent density (kg/m ³)	1.300	1.310	1.340



Graph 1. Granulometric distribution curves.

3.2 Chemical composition

Oxide	% (weight)
SiO ₂	50 - 70%
CaO	5 - 25%
Na ₂ O	5 - 25%
Al ₂ O ₃	1 - 5%
K ₂ O	1 - 5%
MgO	1 - 5%
Fe ₂ O ₃	< 1%
TiO ₂	< 0,5%
SrO	< 0,5%
Cr ₂ O	< 0,5%
PbO	< 0,5%
BaO	< 0,5%

3.3 Color proportion

Color	% (weight)
Green Glass	20 - 40%
Brown Glass	20 - 40%
White Glass	20 - 40%
Blue Glass	0 - 5%

4 Recommendations for use

4.1 Calculation on the amount to be introduced to replace the sand

The apparent density of Active Clear Glass is 15% lower than sand, so the amount to be introduced into the filter must be 15% less than the amount of sand.

4.2 Installation of the filtering media

1. Fill half the filter with water to soften the fall of the glass.
2. Insert the proportion of glass in the filter as indicated in 4.3.
3. Distribute the glass over the entire surface of the filter.
4. Calculate at least 30% of height's free space in the filter to allow the medium to expand during washing.
5. Close the filter.
6. Once all the necessary glass media has been introduced, perform an initial wash according to 4.5.
7. The filter is ready to function.

4.3 Recommended proportion of layers

Item	Filters Ø < 90 cm	Filters Ø > 90 cm
57011 - Grade 1	80%	60%
57012 - Grade 2	-	20%
57013 - Grade 3	20%	20%

4.4 Recommended height of filtering bed

It is recommended to leave a free space of 30% of the height of the filter to allow the expansion of the filtering bed in the washing operation.

4.5 Initial wash

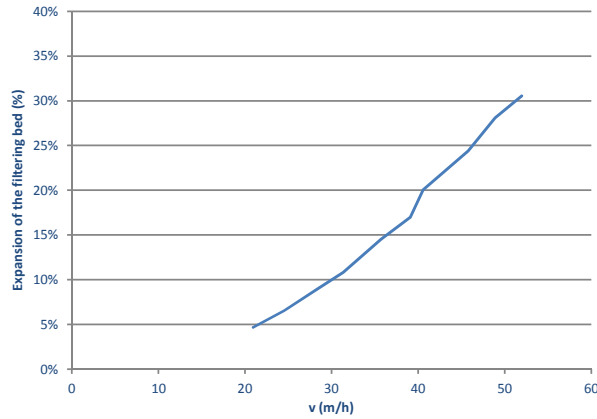
Once the glass has been introduced into the filter, perform at least 3 consecutive washings with clear water for 10-15 minutes. Afterwards, rinse for at least 1 hour.

4.6 Recommended filtration speed

A filtration rate of less than 50 m³ / h / m² is recommended. The filtration efficiency is higher the lower the speed.

4.7 Recommended washing speed

For a correct washing of the filtering bed it is recommended that the media expands at least 20%. For this, in general, the washing speed should be between 40 - 50 m³ / h / m².



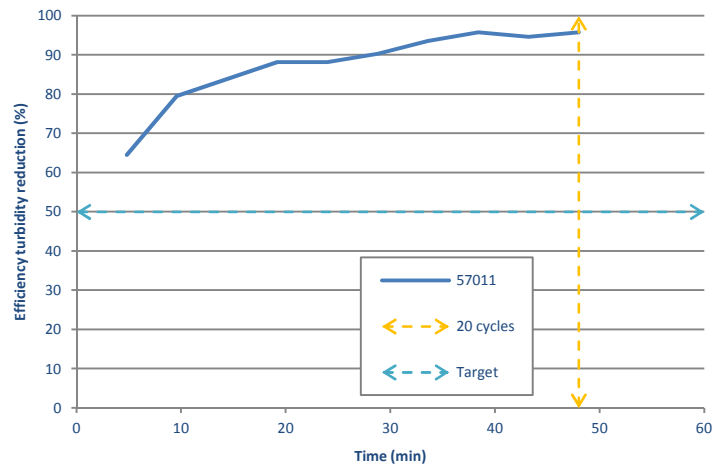
Graph 1 .Expansion curve

4.8 Recommended duration of washing cycle

An adequate washing duration will be one in which the water looks clean once the washing has been carried out. In general, it can be determined that the duration of washing should last between 5 and 10 minutes.

5 Efficiency

Product complies with european norm EN 16713-1, section 7.2, obtaining values of 95% efficiency of the reduction of turbidity.



Graph 2. Efficiency of turbidity-reduction, according to EN 16713-1. Source: IFTS

6 Packaging

Active Clear Glass is supplied in transparent plastic bags treated with an UV inhibitor that protects the plastic from sunlight for 6 to 8 months. Even so, it is recommended to store the product in cool places at room temperature and preserve from solar radiation.

Unit	1 Bag	25kg
Complete pallet	50 Bags	1.250kg

7 Disposal considerations

This product is recycled glass that can be disposed of in the conventional glass recycling bin for further recycling.