

Technical Datasheet	<i>Aqua-garco</i> according to EN 12910	QMS-No. GBT14111
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General

Aqua-garco is a naturally occurring mineral with uniform physical, chemical, hardness and microstructure characteristics, which provide the essential properties for a wide variety of industrial uses.

Aqua-garco is the compositional variety known as *almandite*. There are no free elements; all oxides are combined chemically as an iron-rich aluminosilicate, which has the formula: $Fe_3Al_2(SiO_4)_3$.

Texturally and compositionally uniform in all sizes. All material mined from the same high-grade deposit.

Applications

Inert filter medium

- as polishing layer (because of its high density you can choose finer sizes compared to *Aqua-sand*) wherever extremely high water quality is required,
- for removal of suspended solids down to 1 μm ,
- for pre-filtration to protect valuable units like Activated Carbon Filters, Ion-exchangers and Reverse Osmosis Membranes,
- in single-, dual- or triple-layer filter, combined with *Aqua-sand* or *Aqua-cite* or *Aqua-sand* plus *Aqua-cite*.

Chemical analysis

		Average figures	EN 12910
SiO ₂	mass-%	37	32 - 42
Al ₂ O ₃	mass-%	21	15 - 25
FeO	mass-%	29	20 - 40
Fe ₂ O ₃	mass-%	4	0 - 15
TiO ₂	mass-%	< 1	0 - 5
CaO	mass-%	2	0 - 5
MgO	mass-%	6	0 - 15
MnO	mass-%	< 1	0 - 5

Physical characteristics

		Average figures	EN 12910
Density	g/cm ³	4.1	4.1
Bulk density	kg/m ³	2250	2150 - 2250
Acid solubility	insoluble		
Shape	sub-rounded to sub-angular		
Sizes available	Standard sizes 0.3–0.6 mm and 1.4–2.5 mm, other sizes upon request.		

Packaging

- 25 kg woven plastic bags, palletised covered by plastic foil, 1 mt per pallet.