Technical Datasheet	***Aqua-garco*** according to EN 12910	QMS-No. GBT14111

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 alumino-silicate, 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 it's 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_2O_3	mass-%	21	15 - 25
FeO	mass-%	29	20 - 40
Fe_2O_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.