

Technical Datasheet
Aqua-garfine
 according to EN 12910

QMS-No.
GBT61111
General

Aqua-garfine 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-garfine 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: $Fe_3Al_2(SiO_4)_3$.

This natural product originates from a very large alluvial deposit. It is processed to provide a consistent clean product free of organic matter, dust and superfines.

Applications
Seeding material

for upstream crystallisation softening process. Because of its high density and very uniform, narrow grading it

- allows a much lower reactor height compared to silica sand and
- guarantees a minimum to none carry over.

Chemical analysis

		Average figures	EN 12910
SiO ₂	mass-%	36.1	32 - 42
FeO	mass-%	29.8	20 - 40
Al ₂ O ₃	mass-%	20.4	15 - 25
Fe ₂ O ₃	mass-%	1.7	0 - 15
TiO ₂	mass-%	1.8	0 - 5
MnO	mass-%	1.1	0 - 5
CaO	mass-%	1.6	0 - 5
MgO	mass-%	6.0	0 - 15

Typical mineral composition

Garnet (Almandite)	mass-%	98.0	-
Ilmenite	mass-%	1.5	-
Zircon	mass-%	0.25	-
Quartz	mass-%	0.25	-

Physical characteristics

		Average figures	EN 12910
Density	g/cm ³	4.1	4.1
Bulk density, packed	kg/m ³	2380	< 2400
Shape	sub-angular		
Sizes available	0.20-0.35 mm and 0.18-0.55 mm		

Packaging

- 25 kg 2-ply craft paper bags with plastic inner bag, palletised, shrink-wrapped.
- Big bags.
- Bulk carriers.