

Technical Data Sheet

RockRidge Garnet

Revision: January 5, 2020

Typical Physical Characteristics

Typical Mineral Content

Typical Chemical Composition

RockRidge Garnet offers a wide array of sizes in order to ensure maximum performance for a variety of blasting and water jet cutting applications.

Our garnet is a naturally occurring mineral that is composed mainly of Almandine. This material is known for its natural hardness and durability, which allows for increased efficiency in many abrasive applications.

RockRidge Garnet is environmentally inert and meets all Occupational Health and Safety Administration (OSHA) requirements.

RockRidge Garnet also meets all ISO11126-10:200 requirements for chloride and free silica content.

Typical Mineral Content

Mineral	%
Almandine	90.0 - 97.0
Ilmenite	1.0 - 2.0
Pyroxene	1.25 - 1.75
Rutile	0.5 - 1.0
Quartz	<0.1
Hornblende	<0.5

Typical Physical Characteristics

Specific Gravity	3.8 - 4.1
Bulk Density	2.1 - 2.4 g/cm ³
Mohs Hardness	7.5 - 8.0
Colour	Dark Red/Pink
Grain Shape	Sub Angular
Conductivity	< 25 ms/m
Acid Solubility	< 1.0%

Typical Chemical Composition

Fe ₂ O ₃	10.0 - 12.0
SiO ₂	40.0 - 42.0
TiO ₂	1.5 - 3.5
Al ₂ O ₃	18.0 - 20.0
Fe ₂ O	13.5 - 14.5
CaO	10.0 - 11.0
MgO	5.5 - 6.5
MnO	< 0.2
Sol. Cl	< 40 ppm

Typical Sizing

20/40

Sieve	µm	%
18	1000	0
20	850	0-5
30	600	10-20
35	500	65-75
40	425	8-15
-40	-425	3-7

80

Sieve	µm	%
40	425	0
50	300	16-22
60	250	36-42
70	212	29-35
80	180	3-9
100	150	0-4
-100	-150	0-2

30/60

Sieve	µm	%
20	850	0
30	600	5-15
35	500	25-35
40	425	20-30
50	300	25-35
60	250	0-10
-60	-250	0-3

120

Sieve	µm	%
70	212	0
100	150	30-40
120	125	30-40
140	106	5-10
170	90	3-7
-170	-90	3-7

Note: Custom and other sizes are available upon request.