Garnet Edge

TECHNICAL DATASHEET

Revision: Sep 9, 2024

Garnet Edge Abrasive

Garnet Edge offers a wide array of sizes 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.

Garnet Edge is environmentally inert and meets all Occupational Health and Safety Administration (OSHA) requirements. Garnet Edge also meets all ISO11126-10 requirements for chloride and free silica content.

Egyptian garnet is the main source of Garnet edges, other approved sources shall be obtained regarding requirements.

Typical Physical Characteristics

Specific Gravity	3.8 - 4.1
Bulk Density	2.1 - 2.4 g/cm^3
Mohs Hardness	7.5 - 8.0
Color	Dark Red / Pink
Grain Shape	Sub Angular
Conductivity	< 25 ms/m
PH	6.8:7.1

Typical Mineral Content

Mineral	%
Almandine	84.0 - 90.0
Ilmenite	1.0 - 2.0
Pyroxene	1.25 - 1.75
Rutile	0.5 - 1.0
Quartz	< 0.1
Free silica	< 0.5

Typical Chemical Composition

Fe_2O_3	28.0 - 35.0
SiO_2	29.0 - 32.0
TiO_2	3.3-4.0
Al_2O_3	15.0 - 20.0
CaO	3.0 – 4.0
MgO	2.0 - 3.3
MnO	9.3-10.4
Sol. Cl	< 20 ppm

Typical Sizing

36

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

100

Sieve	µm	%
50	300	0
70	212	15-25
80	180	35-50
100	150	20-30
120	125	6-14
-120	-125	0-4

30/60

Sieve	µm	%
30	600	0
35	500	0-5
40	425	15-25
50	300	65-80
60	250	2-7
-60	-250	0-5

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

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

150

Sieve	µm	%
100	150	0
120	125	5-10
140	106	40-60
170	90	25-40
200	75	5-10
230	63	1-3
-230	-63	0-3