

## GARNET SAND

Almandite garnet is a chemically inert non-metallic mineral that is quite common in the natural environment. It is found in trace amounts in most river and beach sands and is known for its hardness and durability. The high levels of hardness and toughness make almandite garnet ideal for many abrasive applications. Its high specific gravity as well as its chemical and abrasive resistance makes almandite garnet ideal for filtration. Almandite garnet is also a popular semi-precious gem and is the birthstone for January.

### Certifications and approvals:

NSF and California Air Resource Board, further: The product Garnet sand is certified according to ISO 9001 (certification no. 119487) and meets the requirements the ISO 11126-10 and 11127.

Hardness:	7.5 – 8.0 per Mohs scale	Specific gravity:	4.0 – 4.1
Acid solubility:	<1%	Melting point:	1,315°C
Chloride content:	<25 PPM	Free silica content:	<0.5%
Available size:	#12/20 - #120 mesh	Colour:	deep red, reddish brown
Grain shape:	blocky, sub-angular to sub-rounded grains (uncrushed)		
Water solubility:	Insoluble under standard conditions. (20° C, distilled water)		

### Typical chemical analysis:

Silicon dioxide	(SiO <sub>2</sub> )	35%	(non crystalline)
Ferric oxide	(Fe <sub>2</sub> O <sub>3</sub> )	33%	
Aluminium oxide	(Al <sub>2</sub> O <sub>3</sub> )	23%	
Magnesium oxide	(MgO)	7%	
Calcium oxide	(CaO)	1%	
Manganese oxide	(MnO)	1%	

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## Specification

(Percentage Retained, U.S. standard screen)

	Sieve U.S.							
MM	Standard	#12/20	#12/40	#20/40	#20/60	#30/60	#80	#120
1.680	12							
1.410	14							
1.190	16	0-15	0-15		0-1			
0.840	20	45-60	10-60	0-5	0-5	0-1		
0.594	30	30-40	25-50	30-60	10-25	0-10		
0.417	40	0-5	5-50	35-60	25-50	10-45	0-5	
0.297	50		0-10	0-18	25-45	40-70	15-35	
0.249	60			0-5	0-15	5-20	20-40	0-5
0.178	80				0-5	0-10	20-50	30-50
0.125	120					0-5	0-15	40-65
	Pan						0-3	0-10

## Packaging options:

Packaging is available to customer's specifications. Standard packaging includes 25 kg, 1 metric ton and/or 2 metric tons Big-Bags.