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Commercial Information
The Art of Powerful Cleaning...

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Title: Airblast Garnet



AIRBLAST garnet is a natural mineral and not a by-product of a chemical process. It is inert and non-toxic and virtually free of silica, thus excluding any danger whatsoever of silicosis hazard. AIRBLAST garnet has a very low dust emission. This makes it safe for the operator, does not pollute the atmosphere and causes minimal disturbance in the vicinity and adjoining areas. In consequence the use of natural garnet as an abrasive has won a worldwide approval among occupational health authorities. Moreover, as AIRBLAST garnet is an environmental friendly material, it is now gaining favour with many environment protection authorities, for the following main reasons:

1. Garnet does not pollute the atmosphere because it has very low dust emission. Therefore it offers no known health hazard. (See Note)
2. When used offshore, does not contaminate or foul the sea-bed nor disturb marine life.
3. Due to its high productivity, less garnet is used and therefore less cleanup and disposal.
4. As garnet could be recycled several times and also being a natural non-toxic mineral, it does not create disposal problems as other slag abrasives do.

Note: Exposure to dust due to blasting can cause eye, throat or lung irritation, coughing or shortness of breath. Chronic bronchitis, emphysema and other lung diseases may be aggravated by exposure to this dust.

STANDARD SIZES OF GARNET									
Size / Grade		A+	A	B	C+	C	D+	D	E
Mesh	MM	1.700 ~ 0.600	1.100 ~ 0.425	0.850 ~ 0.300	0.850 ~ 0.180	0.600 ~ 0.180	0.425 ~ 0.125	0.300 ~ 0.125	0.250 ~ 0.090
Retained		%	%	%	%	%	%	%	%
12	1,700	1,17							
16	1,100	11,58	0,12						
18	1,000	74,21	19,58						
20	0,850	8,36	46,88	0,17	0,14				
30	0,600	4,68	33,10	31,25	12,70	1,20			
40	0,425		0,32	60,68	32,40	28,50	0,02		
50	0,300			7,90	44,62	53,20	46,30	4,20	
60	0,250				7,54	14,60	37,70	48,00	1,53
80	0,180				2,60	2,50	15,64	44,00	51,87
120	0,125						0,34	3,80	39,54
140	0,106								4,35
170	0,090								2,71
Total		100	100	100	100	100	100	100	100

Application of Garnet: A+ = Water Filtration - A = Water Filtration - B = Sand Blasting - C+, C = Sand Blasting - D+ = Water Jet Cutting - D = Water Jet Cutting - E = Water Jet Cutting.

Mineralogical Composition :

Non Magnetic	:	2.0 to 1.0%
Ilmenite	:	1.0 to 2.0%
Garnet	:	97%

SPECIFIC WEIGHT	:	4.1g/cm ³
AVERAGE BULK	:	4 g/cm ³
HARDNESS	:	8 (Mohs Scale)

STANDARD SIZE RANGES

Grade	Grain Size mm
A.	0.71 – 1.40 mm
B.	0.50 - 0.85 mm
C.	0.30 - 0.60 mm

SURFACE PROFILE (ANCHOR PATTERN)

Grade	Profile (Microns)
A.	65 – 95
B.	50 - 70
C.	35 - 55

* These are average figures obtained on tests carried out.

PACKING

Packed in 25kg-lined bags with extra polythene lining bags – total 40 bags packed into one ton Jumbo bag or packed loose in one ton lined Jumbo bag.

MINERALOGICAL COMPOSITION:

Garnet (Almandite)	:	97 - 98 %
Ilmenite	:	1-2 %
Quartz	:	½ %
Others	:	½ %

PHYSICAL CHARACTERISTICS:

Specific Weight	:	4.1 g/cm ³
Average Bulk	:	2.4 g/cm ³
Hardness	:	8 (Mohs scale)

OTHER CHARACTERISTICS:

Crystal System	:	Cubic
Habit	:	Dodecadnedron with occasional Trapezohedron
Fracture	:	Sub – Conchoidal
Durability	:	Very good
Free Flow	:	90%Minimum
Susceptibility to Acid	:	None
Moisture Absorption	:	Non Hygroscopic, Inert