

INDIAN INSTITUTE OF TECHNOLOGY, KANPUR

REQUEST FOR QUOTATION

Tender No. IITK/4i-Lab./2017-2018/01

Date: 24/07/2017

Tender Opening date: 24/07/2017

Tender Closing Date: 02/08/2017

Sealed two bid system type tender are invited Abrasive Sand Garnet of 80Mesh Size Qty (4+4=8) MT.

Average Chemical Composition (Typical)

SiO ₂ *	36%
Al ₂ O ₃	20%
FeO	30%
Fe ₂ O ₃	2%
TiO ₂	1%
MnO	1%
CaO	2%
MgO	6%

* Refers to SiO₂ bound within the lattice of the homogeneous garnet crystal (no free silica)

Physical Characteristics (Typical)

Bulk Density	2.3T/m ³
Specific Gravity	4.1
Hardness (moh)	7.50-8.0
Melting Point	1250°C
Shape of natural grains	sub-angular

Other Characteristics (Typical)

Conductivity	10-15ms/m (max 25ms/m)
Radioactivity	..Not detectable above background
Moisture AbsorptionNon-hygroscopic, Inert
Total Chlorides 10-15ppm (max 25ppm)
Free Iron	less than 0.01%*
Copper	less than 0.01%*
Other Heavy Metals	less than 0.01%*
Sulphur	less than 0.01%*
Lead	less than 20ppm

* Generally below detectable levels.

Mineral Composition (Typical)

Garnet (Almandite)	97-98%
Ilmenite	1-3%
Zircon	0.20%
Quartz (free silica)	<0.5%
Others	0.25%

Waterjet Grade Sizings (Typical)

	Grade:	50 Mesh	80 Mesh	120 Mesh
US Mesh	Microns	(Cumulative Wt% Retained)		
30	600	0		
35	500	1		
40	425	14	0	
45	355	40	2	
50	300	75	18	0
60	250	90	40	0.01
70	212	96	70	16
80	180	99	90	75
90	150	100	97	90
115	125		99	99
150	106		100	99.5
170	90			100

Other Terms & Conditions.

- 1 –Hard copy of the tender must reach before date 02/08//2017 to the mentioned ADDRESS.
- 2 –Maximum Discount to be offered keeping in view IIT's being nonprofit making organizations.
- 3– Only OEM authorized dealers need to participate. Certificate submission with tender is mandatory.
- 4- Bidder must mention tender number on envelope.

All Quotation to be sent to:

Prof. Sameer Khandekar

Head Imaging Laboratory, 4-I, Section

IIT Kanpur-208016