

# Wulanchabu Xindi Trade Co., Ltd.

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<https://chinesegarnet.com>

## Technical Data Sheet for Alluvial Garnet

### 1. Average chemical composition (WT%)

SiO<sub>2</sub> ----- 37.31  
 Al<sub>2</sub>O<sub>3</sub> ----- 20.8  
 Fe<sub>2</sub>O<sub>3</sub>+FeO ----- 29.15  
 MgO ----- 8.8  
 MnO ----- 0.8  
 CaO ----- 1.1  
 TiO<sub>2</sub> ----- 1.2

### 2. Physical characteristics

Shape of garnet particles ----- Sub-angular to sub rounded  
 Color ----- Pink  
 Odour ----- No appreciable  
 Solubility in water ----- Insoluble  
 Bulk Density ----- >2000kg/M3  
 Specific gravity ----- 3.8-4.3 g/cm<sup>3</sup>  
 Melting point ----- 1170°C-1280°C  
 Hardness ----- 7.50-8.0(hm)  
 Mean refractive ----- 1.714-1.887

### 3. Other characteristics

Conductivity of aqueous extract ----- 48-83μS /cm  
 Radioactivity ----- Not detectable  
 Chloride ----- Less than 1ppm  
 Moisture ----- Non-hygroscopic  
 Free iron ----- Non  
 Free silicon ----- Non  
 Other heavy metal ----- Non

### 4. Particle Distributions

Tyler Screen	Opening (Microns)	#12/20	#20/40	#30/60	#80
10	2000				
12	1700	0-5			
14	1400	10-20			
16	1180	20-30			
20	1000	20-40	5-10		
24	710	0-5	10-30		
30	600		30-60	0-2	
35	500			10-20	
40	425		5-10	10-20	
45	355		0-5	10-30	0-2
50	325		0-5	20-30	5-10
60	250			10-30	25-35
70	212			5-10	25-35
80	180			0-2	10-20
100	150				10-20
-100	150				5-10
120	125				
140	106				