

# Brown Fused Alumina



## Brown Fused Alumina grit for resin bonded abrasives

We choose high-quality bauxite and adopt tilting furnace, special cooling crystallization process. Main features: High cleanliness, super grinding capacity, high toughness, high compression strength, no rusty spot, greatly improved grinding efficiency, applicable to make high-grade resin bonded abrasives.

Usage	Specification		Main Chemical Composition (%)					Magnetic Material (%)
			Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	TiO <sub>2</sub>	CaO	
High-grade resin bonded abrasives	F Grit	F12-F24	96.0 ±	< 0.30	< 1.00	> 1.6	≤ 0.45	≤ 0.024
		F30-F100	0.5					≤ 0.019
		F120-F220						≤ 0.014

Physical Property	
Capillarity	17mm
Compression Strength	34N
Milling Toughness	41%
Vickers Hardness	2100HV
True Specific Gravity	3.97g/cm <sup>3</sup>
Cleanliness	> 97.5%

Note: Above is the typical value of abrasive F36

## Brown Fused Alumina grit for vitrified bonded abrasives

We choose high-quality bauxite and adopt tilting furnace, special cooling crystallization process. Main features: Lower expansion coefficient, good hydrophily, high compression strength, abrasives made by blue color, no reticulate crack, greatly improved grinding precision and efficiency, applicable to make high-grade resin bonded abrasives.

Usage	Specification		Main Chemical Composition (%)					Magnetic Material (%)
			Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	TiO <sub>2</sub>	CaO	
High-grade vitrified bonded abrasives	F Grit	F12-F24	95.5 ±	< 0.30	≤1.00	> 2.0	≤0.45	≤0.024
		F30-F100	0.5					≤0.019
		F120-F220						≤0.014

Physical Property	
Color	Brown
Crystal form	Trigonal crystal system
Compression Strength	34N
Milling Toughness	41%
Vickers Hardness	2100HV
True Specific Gravity	3.97g/cm <sup>3</sup>
Cleanliness	> 97.5%
Capillarity	17mm

Note: Above is the typical value of abrasive F36

## Brown Fused Alumina for refractory

We choose high-quality bauxite and adopt tilting furnace, special cooling crystallization process. Material is with high purity, high crystallinity, lower expansion coefficient, refractoriness above 1900°C, it's the best raw material for refractory.

Usage	Specification		Main Chemical Composition (%)					Magnetic Material (%)
			Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	TiO <sub>2</sub>	CaO+ MgO	
Refractory	Size sand	0-1mm	95.3-96.5	< 0.3	< 1.00	> 1.6	≤0.55	< 0.05
		1-3mm						
		3-5mm						
		5-8mm						

---

Physical Property	
Color	Brown
Refractoriness	> 1900°C
Melting Point	2050°C
Compression Strength	34N
Molded Toughness	85%
Vickers Hardness	2100HV
True Specific Gravity	3.97g/cm <sup>3</sup>

---

Room 801, Building C3,  
Qilu E-commerce Valley, No.139 Liuquan Road,  
Zibo High-tech Zone, Shandong, China 255086  
Tel: +86-533-3171838  
Email: Tea.song@jct-abrasives.com  
Website: [www.jct-abrasives.com](http://www.jct-abrasives.com)

