



Luoyang Zhongsen Refractory Co., Limited
Yaowan Village, South Dukang Road, Yichuan County, Luoyang City, Henan Province, P.R. CHINA
TEL: 0086-379-69351288 WEB: www.zhongsen-refractory.com

Certificate of Analysis

High Temperature Calcined Brown Fused Alumina

General Information

Product : High Temperature Calcined Brown Fused Alumina for Resin Bonded Abrasives, Vitrified Bonded Abrasives, High Grade Abrasive Tolls

Other Names : Blue Fire Brown Fused Alumina, Brown Fused Aluminium Oxide, Brown Aluminum Oxide, Brown Corundum

Country of Origin : China

Manufacturer of Material : Luoyang Zhongsen Refractory Co., Limited

Features : Chemical Stability, High Cleanness

Picture of Product:



Physical Specifications & Package

Main Content : Al_2O_3 (Aluminum Oxide)

Specific Gravity : $\geq 3.90 \text{ g/cm}^3$

Bulk Density : $1.4\text{-}2.3 \text{ kg/m}^3$

Hardness : 9 MOSH

Color : Blue/Dark Blue

Melting Point : 2300°C

Sizes Available : F8-F220, F280-F2000, other sizes to request

Package : Jumbo Bag, 25kg Bag and 40 Bags on a Pallet



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Manufacturing & Application

This material is Brown Fused Alumina which is calcined(heated) under 1350°C or 1050°C temperature for 4-8 hours. Through this processing, many substances which are not good for abrasives are vaporized or separated out of the material. The material become more stable and harder to have chemical reaction during manufacturing of abrasives tools. Inner pressure is removed, single crystal is increased, less magnetic contents, tougher and stronger for ball grinding or blasting. And the material becomes blocky. By using calcined Brown Fused Alumina, you will get more production output of abrasives tools.

Applications: High Quality Grinding Wheels, Big Grinding Wheels and other Bonded Abrasives Tools, High Speed Intensity Sand Belts and other Coated Abrasives Tolls

Particle Distribution & Chemical Content

Calcined Brown Fused Alumina FEPA Sizes for Bonded Abrasives(Tilting Furnace)

| Physical Analysis | Grit# | Max Size | Big Size | Basic Size | Mixed Size | Small Size | Chemical Specifications | |
|-------------------|----------|----------|----------|------------|------------|------------|--------------------------------|--------|
| | F24 | +1.18 | +0.85 | +0.71 | +0.60 | -0.50 | AL ₂ O ₃ | 95.58% |
| | Standard | 0% | 0-25% | 45-100% | 65-100% | 0-3% | SiO ₂ | 1.06% |
| | Sample 1 | 0 | 17 | 55 | 79.5 | 0.5 | TiO ₂ | 2.52% |
| | Sample 2 | 0 | 17 | 55 | 79.5 | 0.5 | Fe ₂ O ₃ | 0.07% |
| Physical Analysis | Grit# | Max Size | Big Size | Basic Size | Mixed Size | Small Size | Chemical Specifications | |
| | F36 | +0.85 | +0.60 | +0.50 | +0.425 | -0.355 | AL ₂ O ₃ | 95.55% |
| | Standard | 0% | 0-25% | 45-100% | 65-100% | 0-3% | SiO ₂ | 1.07% |
| | Sample 1 | 0 | 18 | 54.5 | 78.5 | 0.5 | TiO ₂ | 2.55% |
| | Sample 2 | 0 | 18 | 54.5 | 78.5 | 0.5 | Fe ₂ O ₃ | 0.07% |
| Physical Analysis | Grit# | Max Size | Big Size | Basic Size | Mixed Size | Small Size | Chemical Specifications | |
| | F46 | +0.60 | +0.425 | +0.355 | +0.300 | -0.250 | AL ₂ O ₃ | 95.50% |
| | Standard | 0% | 0-30% | 40-100% | 65-100% | 0-3% | SiO ₂ | 1.07% |
| | Sample 1 | 0 | 24 | 50 | 72.5 | 0.5 | TiO ₂ | 2.60% |
| | Sample 2 | 0 | 24 | 50 | 72.5 | 0.5 | Fe ₂ O ₃ | 0.08% |

| Physical Analysis | Grit# | Max Size | Big Size | Basic Size | Mixed Size | Small Size | Chemical Specifications | |
|-------------------|----------|----------|----------|------------|------------|------------|--------------------------------|--------|
| | F60 | +0.425 | +0.30 | +0.25 | +0.212 | -0.18 | AL ₂ O ₃ | 95.45% |
| | Standard | 0% | 0-30% | 40-100% | 65-100% | 0-3% | SiO ₂ | 1.09% |
| | Sample 1 | 0 | 23.5 | 48.5 | 73 | 0.5 | TiO ₂ | 2.62% |
| | Sample 2 | 0 | 23.5 | 48.5 | 73 | 0.5 | Fe ₂ O ₃ | 0.08% |

Fixed Furnace material also available

Shape Compare(Roller & Bamarc Crushed/Milled)



Bamarc Matetrial has higher Bulk Density better for abrasives.