



BLACK SILICON CARBIDE F16

TECHNICAL DATA SHEET

黑碳化硅 F16 技术参数表

➤ **PRODUCT/产品:** Black Silicon Carbide F16/黑碳化硅 16#

➤ **Physical Index/物理参数:**

Hardness: HV/ 维氏硬度	2840-3320kg/mm ²
Hardness: Mohs/ 莫氏硬度	9.2-9.3
Specific Gravity/ 比重	3.2-3.45 g/cm ³
Particle Shape/ 颗粒形态	Fine powder/ 细小粉末
Color/ 颜色	Black/ 黑色
Bulk density(LPD)/ 堆积密度	1.45-1.55 g/cm ³
Crystal shape/ 晶型	Hexagonal/ 六方晶型
Melting Point/ 熔点	dissociated at about 2300° C/2300° C 游离
Maximum service temperature/ 使用温度上限	1900° C
Thermal conductivity/ 导热系数	70-130W/M · K
Thermal expansion coefficient/ 热膨胀系数	3.9-4.5 x10 ⁻⁶ /° C (0-1600° C)

➤ **Chemical Composition/化学成分:**

Chemical Item/ 化学成分	Guarantee Value/ 保证值(%)	Typical Value/ 典型值(%)
SiC/ 碳化硅	≥ 98%	98.60
Free C/ 游离碳	≤ 0.20	0.15
Fe ₂ O ₃ / 三氧化二铁	≤ 0.20	0.16

➤ **Particle Size Distribution / 粒度分布:**

Grit 粒度	Mesh# 目数	Mesh size(um) 目数尺寸	Weight Standard(%) 重量占比	Typical Value(%) 典型值
Coarsest Grit 最粗粒	+10	2000	0	0
Coarse Grit 粗粒	+14	1400	Max. 20	5.9
Basic Grit 基本粒	+16	1180	Min. 45	51.2
Mixed Grit 混合粒	+16 +18	1180 1000	Min. 70	90.5
Fine Grit 细粒	-20	850	Max. 3	0.3

➤ **Applications/用途:**

- Sandblasting, etching, and carving of materials such as stone and marble. / 石材大理石等材料的喷砂、蚀刻、雕刻。
- Surface cleaning and passivation of materials such as stainless steel semiconductor components and alloy steel. / 不锈钢半导体件、合金钢等材料的表面清理钝化。
- Ceramic products and electronic ceramics sandblasting and grinding. / 陶瓷制品、电子陶瓷喷砂研磨。
- Polishing and grinding marble, granite, jade, jadeite, gemstones, etc. / 打磨研磨大理石、花岗岩、玉石、翡翠、宝石等。
- Glass artworks, glass products polishing and grinding, etc. / 玻璃艺术品、玻璃制品抛光研磨等。
- Production of grinding tools such as grinding stones, steel paper sand discs, silicon carbide abrasive brushes, black diamond drawing wheels, sponge grinding blocks, and oilstones. / 生产研磨石、钢纸砂盘、碳化硅磨料刷、黑金刚拉丝轮、海绵磨块、油石等磨具制品。
- Reaction sintered silicon carbide ceramics: silicon carbide ceramic filters, silicon carbide ceramic membrane tubes, silicon carbide wear-resistant products, silicon carbide ceramic water pumps, bent pipes, silicon carbide wear-resistant plates, etc. / 反应烧结碳化硅陶瓷：碳化硅陶瓷过滤器、碳化硅陶瓷膜管、碳化硅耐磨制品、碳化硅陶瓷水泵、弯管、碳化硅耐磨板等。
- Composite materials such as foam glass, modified resin, lubricating oil, anti-corrosion mastic and other materials are added. / 复合材料例如泡沫玻璃、改性树脂、润滑油、防腐胶泥等材料添加。
- Wear resistant products such as brake pads, wear-resistant sandpaper with added materials. 耐磨制品例如刹车片、耐磨砂纸添加材料。
- Refractory materials such as silicon carbide refractory aggregates, metallurgical carbonization materials. / 耐火材料例如碳化硅耐火骨料，冶金增碳材料。

➤ **Package/包装:**

25 公斤编织袋+吨包 / 25kgs/Bag+1Ton/Jumbo Bag

25 公斤编织袋+1 吨托盘/ 25kgs/Bag+1Ton/Pallet

接受纸袋等定制包装/Customized Packages such as paper bag are available