



黑碳化硅 F12 技术参数表

BLACK SILICON CARBIDE F12 TECHNICAL DATA SHEET

➤ **PRODUCT/产品:** Black Silicon Carbide F12/黑碳化硅 12#

➤ **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 | 1.40-1.52 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 | ≥ 98.5% | 98.69 |
| Free C/游离碳 | ≤ 0.20 | 0.15 |
| Fe ₂ O ₃ /三氧化二铁 | ≤ 0.20 | 0.14 |

➤ **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 | +7 | 2800 | 0 | 0 |
| Coarse Grit 粗粒 | +10 | 2000 | Max. 20 | 8.5 |
| Basic Grit 基本粒 | +12 | 1700 | Min. 45 | 49.3 |
| Mixed Grit 混合粒 | +12 +14 | 1700 1400 | Min. 70 | 89.6 |
| Fine Grit 细粒 | -16 | 1180 | Max. 3 | 0.4 |

➤ **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