

# *Technical Data Sheet*

**Product:** Black Silicon Carbide – Bonded Abrasives (Macrogrits & Microgrits)

**Description:** Black Silicon Carbide is produced in electrical resistance furnaces from high purity silica sand, quartz sand and petroleum coke. The final product is sharp and friable with outstanding electrical and thermal conductivity properties.

**Applications:** Bonded abrasives can be utilized for many different grinding applications, such as cut-off wheels, snagging wheels, mounted wheels, segments, plugs, and cones, and have a wide range of applications, with different bonding agents offering different functions.

## **Typical Chemical Analysis:**

Silicon Carbide (SiC)	98.50%
Iron (Fe <sub>2</sub> O <sub>3</sub> )	0.15%
Free Carbon (C)	0.14%

## **Physical Characteristics:**

Crystal Form:	Hexagonal (Alpha SiC)
True Density:	3.21 g/cm <sup>3</sup>
Hardness:	Knoop (100) 2500 kg/mm <sup>2</sup> , Mohs 9.0+
Melting Point:	SiC does not melt but dissociates at approx. 2500 C
Color:	Black

## **Macrogrit & Microgrit Sizing:**

Macrogrit Sizes F4 to F220: Certified to FEPA F Standard 42-1: 2006  
Microgrit Sizes F230 to F2000: Certified to FEPA F Standard 42-2: 2006 (JIS Standard also available)

## **Packaging :**

25kg PP bags or 1000kg Big bags

# *Technical Data Sheet*

**Product:** Green Silicon Carbide – Bonded Abrasives (Macrogrits & Microgrits)

**Description:** Green Silicon Carbide is produced in electrical resistance furnaces from high purity silica sand, petroleum coke and  $\text{NaCl}_2$ . The smelted crystals have high purity, high hardness and strong cutting force, and are suitable for processing hard and brittle materials compared to black silicon carbide.

**Applications:** Bonded abrasives can be utilized for many different grinding applications, such as cut-off wheels, snagging wheels, mounted wheels, segments, plugs, and cones, and have a wide range of applications, with different bonding agents offering different functions.

**Typical Chemical Analysis:**

Silicon Carbide (SiC)	98.50%
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Hardness:	Knoop (100) 2500 kg/mm <sup>2</sup> , Mohs 9.0+
Melting Point:	SiC does not melt but dissociates at approx. 2500 C
Color:	Green

**Macrogrit & Microgrit Sizing:**

Macrogrit Sizes F4 to F220: Certified to FEPA F Standard 42-1: 2006

Microgrit Sizes F230 to F2000: Certified to FEPA F Standard 42-2: 2006 (JIS Standard also available)

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