

绿碳化硅 (GC)

Green Silicon Carbide(GC)

绿碳化硅适宜磨削硬质合金和硬脆金属及非金属材料，如铜、黄铜、铝和镁等有色金属和宝石，光学玻璃，陶瓷等非金属材料。超细微粉也是高级陶瓷材料。

Green silicon carbide is suitable for processing hard alloy, metallic and non-metallic materials with hard and brittle features such as copper, brass, aluminum, magnesium, jewel, optical glass, ceramics, etc. Super powder of it is also a kind of ceramic material.

绿碳化硅化学成份，物理性能的典型值

牌号	粒度号	化学成份 (%)			磁性物含量(%)	堆积密度(g/cm ³)
		SiC	F.C	Fe ₂ O ₃		
GC	F46	99.39	0.10	0.09	0.0182	1.47
	F120	99.41	0.11	0.09	0.0097	1.40
	F180	99.13	0.14	0.12	0.0058	1.30
	F360	98.97	0.17	0.15	0.0108	1.28
GC-B GC-P	F46 P40	99.05	0.15	0.14	0.0196	1.41
	F120 P120	98.65	0.16	0.13	0.0134	1.33
	F180 P180	98.30	0.14	0.16	0.0112	1.27
	F360 P600	98.10	0.19	0.21	0.0123	1.23

Type value of green silicon carbide physical chemical performance index

Type	Grit	Chemical composition (%)			Magnetic contents (%)	Range of build density (g/cm ³)
		SiC	F.C	Fe ₂ O ₃		
GC	F46	99.39	0.10	0.09	0.0182	1.47
	F120	99.41	0.11	0.09	0.0097	1.40
	F180	99.13	0.14	0.12	0.0058	1.30
	F360	98.97	0.17	0.15	0.0108	1.28
GC-B GC-P	F46 P40	99.05	0.15	0.14	0.0196	1.41
	F120 P120	98.65	0.16	0.13	0.0134	1.33
	F180 P180	98.30	0.14	0.16	0.0112	1.27
	F360 P600	98.10	0.19	0.21	0.0123	1.23

陶瓷结合剂磨具，砂带用绿碳化硅磨料代号为 GC

有机结合剂磨具用绿碳化硅磨料代号为 GC-B

手工用张页式涂附磨具用绿碳化硅磨料代号为 GC-P

For vitrified wheels and belts: GC

For organic wheels :GC-B

For sheets : GC-P

绿碳化硅化学成份及磁性物含量国家标准 GB/T 2480-1996

GB/T 2480-1996		化学成份 (%)			磁性物含量	
Type	Grit size	SiC ≥	F.C ≤	Fe ₂ O ₃ ≤	粒度	磁性物含量(%) ≤
GC	F20-F90 P20-P100	99.0	0.20	0.20	F16-F30 P12-P30	0.020
	F100-F150 P120-P150	98.5	0.25	0.50	F36-F60 P36-P60	0.017
	F180-F220 P180-P220	97.5	0.25	0.70	F70-F120 P80-P150	0.015
	F230-F500 P240-P1000	97.0	0.30	0.70	F150-F22 0 P180-P22 0	0.012
	F600-F800 P1200-	95.5	0.40	0.70		
	F1000-F120 0	94.0	0.50	0.70		
	F20-F90 P12-P100	98.5	0.25	0.25	F16-F30 P12-P30	0.035
	F100-F150 P120-P150	98.0	0.30	0.55	F36-F60 P36-P60	0.030
GC-B GC-P	F180-F220 P180-P220	97.0	0.30	0.80	F70-F120 P80-P150	0.025
	F230-F500 P240-P1000	96.5	0.35	0.80	F150-F22 0 P180-P22 0	0.020
	F600-F800 P1200-	94.5	0.45	0.80		
	F1000-F120 0	93.0	0.60	0.80		

Green silicon carbide chemical composition & magnetic contents of China GB/T 2480-1996

GB/T 2480-1996		Chemical composition (%)			Magnetic contents	
Type	Grit size	SiC ≥	F.C ≤	Fe ₂ O ₃ ≤	Grit size	Magnetic Contents (%) ≤
	F20-F90 P20-P100	99.0	0.20	0.20	F16-F30 P12-P30	0.020
	F100-F150	98.5	0.25	0.50	F36-F60	0.017

GC	P120-P150				P36-P60	
	F180-F220 P180-P220	97.5	0.25	0.70	F70-F120 P80-P150	0.015
	F230-F500 P240-P1000	97.0	0.30	0.70	F150-F220 P180-P220	0.012
	F600-F800 P1200-	95.5	0.40	0.70		
	F1000-F1200	94.0	0.50	0.70		
	F20-F90 P12-P100	98.5	0.25	0.25	F16-F30 P12-P30	0.035
	F100-F150 P120-P150	98.0	0.30	0.55	F36-F60 P36-P60	0.030
GC-B	F180-F220 P180-P220	97.0	0.30	0.80	F70-F120 P80-P150	0.025
GC-P	F230-F500 P240-P1000	96.5	0.35	0.80	F150-F220 P180-P220	0.020
	F600-F800 P1200-	94.5	0.45	0.80		
	F1000-F1200	93.0	0.60	0.80		