NANIWA

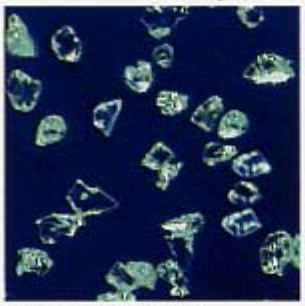
高純度微粉 [研磨材]
High-purity abrasive powders

GC 高純度炭化ケイ素質 [微粉]
High-purity silicon carbide powder

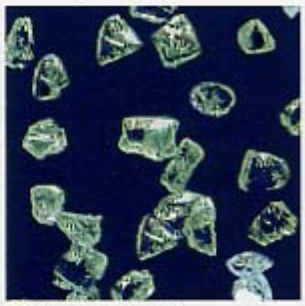
GC微粉は、SiC純度が極めて高い硬質の緑色炭化ケイ素質研磨材です。これを基に更に微粉砕し、分級整粒したものでダイヤモンドに次ぐ硬度を有し、超精密加工に高度で優れた研磨力を発揮します。シャープに整粒された粒形は、水晶精密ラッピング、及びSiインゴットの切断用ワイヤーソーにも極めて高い性能と作業性を発揮します。

GC(green silicon carbide) fine powder is a hard green abrasive made of very pure silicon carbide particles that have pulverized to micron size. The hardness of GC powder is second only to that of diamond, making it an ideal abrasive for polishing processes requiring ultra-high precision. Each precisely sized grain of GC powder guarantees very high perfomance and superb efficiency in applications such as precision lapping of crystals and cutting of silicon ingots with saws.

粒径写真 Photomicrographs of silicon carbide grains



GC #1000(700倍)
(Magnified 700 times)



GC #500(450倍)
(Magnified 450 times)

品質規格(GC)
Quality standards for GC powder

品種 Type	粒度 Grain size	比重 Specific gravity	化学成分 Chemical composition (%)		
			SiC	F.C	Fe.s
GC	#240～#3000	3.16min.	98.0min.	0.5max.	0.3max.
	#4000～#8000	3.10min.	96.0min.	2.0max.	0.3max.

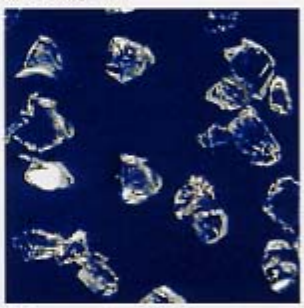
WA 高純度アルミナ質 [微粉]
High-purity alumina powder

WA微粉は、高純度な電融白色アルミナ質研磨材を基に、更に微粉砕・分級整粒したものでAl_2O_3純度98%以上の高純度アルミナです。超仕上用精密砥石、超仕上用研磨布紙の原料、超精密表面仕上用研磨加工など、幅広い用途で優れた性能を発揮します。

WA(white fused alumina) fine powder is an electrically fused white abrasive comprising highly pure alumina that has been pulverized and classified to an amazingly high purity of 98% or better Al_2O_3. WA powder offers excellent features in a wide range of applications including grindstones and polishing paper and cloth for high-precision finishing processed. It is also useful for very high-precis surface finishing.

粒径写真 Photomicrographs of silicon carbide grains

WA #1000(700倍)
(Magnified 700 times)



WA #500(450倍)
(Magnified 450 times)

品質規格(WA)
Quality standards for WA powder

品種 Type	粒度 Grain size	比重 Specific gravity	化学成分 Chemical composition (%)				
			Al_2O_3	SiO_2	Fe_2O_3	TiO_2	Na_2O
WA	#240～#3000	3.90min.	99.0min.	0.3max.	0.1max.	—	0.5max.
	#4000～#8000	3.85min.	98.0min.	1.2max.	0.2max.	—	0.6max.

粒度規格
Grain-size standards

精密研磨用微粉の粒度分布(電気抵抗試験方法) Grain-size distribution of precision polising powders(determined by electrical resistance test) 単位(μm)

粒度 Grain size	最大粒子径 Max. grain diameter	累積高さ3%点の粒子径 Grain diameter at accumulated height of 3% point	累積高さ50%点の粒子径 Grain diameter at accumulated height of 50% point	累積高さ94%点の粒子径 Grain diameter at accumulated height of 94% point
# 240	127 max.	103 max.	57.0±3.0	40 min.
# 280	112 max.	87 max.	48.0±3.0	33 min.
# 320	98 max.	74 max.	40.0±2.5	27 min.
# 360	86 max.	66 max.	35.0±2.0	23 min.
# 400	75 max.	58 max.	30.0±2.0	20 min.
# 500	63 max.	50 max.	25.0±2.0	16 min.
# 600	53 max.	43 max.	20.0±1.5	13 min.
# 700	45 max.	37 max.	17.0±1.3	11 min.
# 800	38 max.	31 max.	14.0±1.0	9.0 min.
#1000	32 max.	27 max.	11.5±1.0	7.0 min.
#1200	27 max.	23 max.	9.5±0.8	5.5 min.
#1500	23 max.	20 max.	8.0±0.6	4.5 min.
#2000	19 max.	17 max.	6.7±0.6	4.0 min.
#2500	16 max.	14 max.	5.5±0.5	3.0 min.
#3000	13 max.	11 max.	4.0±0.5	2.0 min.
#4000	11 max.	8.0 max.	3.0±0.4	1.3 min.
#6000	8.0 max.	5.0 max.	2.0±0.4	0.8 min.
#8000	6.0 max.	3.5 max.	1.2±0.3	0.6 min.*

注* 累積高さ75%点の粒子径 *Grain size at accumulated height of 75% point