Calcined Alumina (焼成製品) KC Part

Characteristics

As CA-83F, CA-50F are calcined Alumina of a hexagonal structure, they are widely used for refractories, ceramics, abrasives, etc. The fine particle content is lower than others and the unit crystal size is 3~5㎛. SA-50D is used for manufacturing sintered alumina or spinel. The unit crystal size is 0.5~1.0㎛. CA-50M is the normal fine product made by milling calcined alumina. It is widely used for refractories, abrasives, fine ceramics. Its unit crystal size is 3~5㎛.

CA-83F, CA-50Fは六方晶系の焼成アルミナ製品で耐火物, セラミック, 研磨材などに使われます. 微粉の含量が少なく, 単位結晶は3~5㎛です. SA-50Dは, 焼結性に優れていることから焼結アルミナまたはスピネル製造に使われます. 微粉の含量が少なく, 単位結晶は0.5~1.0㎛です. CA-5Mは, 焼成製品を粉砕した一般的な微粉製品であり, その大きさは単位結晶に近く3~5㎛です. 主に耐火材や研磨材及びファインセラミックスに使われます.

CA-83F, CA-50F는 육방정계 결정구조의 소성알루미나 제품으로 내화물, 세라믹, 연마재 등에 가장 일반적으로 사용합니다. 미분함량이 적고, 단위결정 크기는 3~5㎛입니다. SA-50D는 소결용제품으로 소결성이 우수하여 소결알루미나 또는 스피넬 제조에 사용합니다. 미분함량이 적고, 단위결정 크기는 0.5~1.0㎛입니다. CA-5M은 소성제품을 분쇄한 일반적인 미분제품으로 단위결정 크기와 유사하며 주로 내화재나 연마재 또는 파인세라믹스에 사용합니다. 단위결정 크기는 3~5㎛입니다.

Specifications

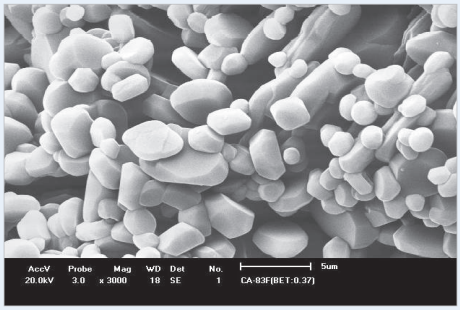
Product Name		CA-83F	CA-50F	SA-50D	SA-50DS	SA-SCS	CA-5M
Chemical Properties	Al_2O_3 (%)	MIN 99.6	MIN 99.6	MIN 99.6	MIN 99.6	MIN 99.2	MIN 99.6
	Na_2O (%)	MAX 0.30	MAX 0.35	MAX 0.30	MAX 0.30	MAX 0.27	MAX 0.35
	Fe_2O_3 (%)	MAX 0.025	MAX 0.025	MAX 0.025	MAX 0.30	MAX 0.30	MAX 0.025
	SiO_2 (%)	MAX 0.02	MAX 0.02	MAX 0.02	MAX 0.10	MAX 0.30	MAX 0.02
	Loss on Ignition (%)	MAX 0.10	MAX 0.10	MAX 0.10	MAX 0.10	MAX 0.2	MAX 0.10
Physical Properties	Moisture (%)	MAX 0.10	MAX 0.10	MAX 0.10	MAX 0.10	MAX 0.40	MAX 0.2
	Dp50 (㎛)	60 ± 10	50 ± 10	55 ± 10	55 ± 10	MIN 55	4 ± 1
	+45㎛ (%)	MIN 60	MIN 40	MIN 50	MIN 50	-	MAX 0.5
	Alpha phase (%)	MIN 95	MIN 95	MIN 95	MIN 95	-	MIN 95
	Specific surface area (㎡/g)	0.3 ~ 0.7	0.3 ~ 0.7	3 ~ 7	3~4	6.5~7.5	-
	Angle of Repose (°)	48 ~ 53	50 ~ 55	38 ~ 43	-	-	-

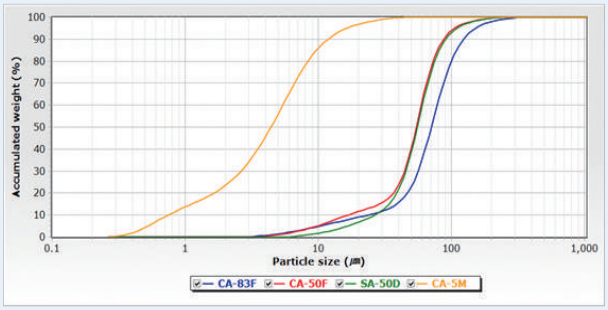
Uses

(1) Fused Alumina, Mullite, Spinel
(2) Refractory Brick, Castable
(3) Sintered Alumina, Ceramic Fiber
(4) High Alumina Ceramics, Whiteware
(5) Abrasives

Packaging

(1) Bulk
(2) Flexible Container Bag (1,000kg)
(3) Paper Bag (25kg, CA-50F and CA-5M Only)





KLS Series (低ソーダアルミナ) KA Part

Characteristics

KLS series is the crystallized α-alumina produced from aluminum hydroxide through the process of calcination, removing caustic soda in a rotary kiln, With under 0.05% of caustic content, 1~4㎛ of α-size, they are usually used for alumina ceramics, spark plugs, electric insulating material and the raw material for high quality ceramics. 3 kinds of products are available according to BET and α-size,

水酸化アルミニウムをロータリーキルンで焼成及び脱ソーダ工程を経て安定なα　アルミナとして結晶化した製品です。ソーダ含有量が0．05％以下でα　サイズが１～４㎛、主にア ルミナセラミックス，スパークプラグ、電気絶縁製品に、また電気絶縁性に優れているのでセラミックスの原料として利用されています。当社はBET、α　サイズにより３種類を生産しています。

수산화알루미늄을 Rotary Kiln에서 소성 및 탈소다 공정을 거쳐 안정적인 α-알루미나로 결정화한 제품입니다. 소다함량이 0.05% 이하로 α-size가 1~4㎛의 알루미나로 주로 알루미나 세라믹스, 점화플러그, 전기절연제품에 사용되며 전기절연성이 우수하여 세라믹스의 원료로서 사용되어집니다. 당사는 BET, α-size에 따라 총 3종류를 생산하고 있습니다.

Specifications

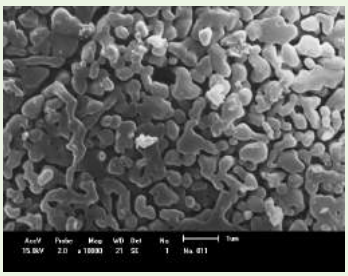
Product Name		KLS-C2	KLS-1N	KLS-5	KLS-100
Chemical Composition	Al_2O_3 (%)	MIN 99.7	MIN 99.8	MIN 99.8	MIN 99.7
	Na_2O (%)	MAX 0.05	MAX 0.05	MAX 0.05	MAX 0.05
	SiO_2 (%)	MAX 0.30	MAX 0.15	MAX 0.10	MAX 0.30
	Fe_2O_3 (%)	MAX 0.03	MAX 0.02	MAX 0.03	MAX 0.03
	Loss of Ignition	MAX 0.10	MAX 0.10	MAX 0.10	MAX 0.10
Physical Properties	Dp50 (㎛)	65±5	55±5		90±10
	Size of α-crystals (㎛)	1~2	0.5~2	1~3	1~2
	Specific Surface Area (m^2/g)	1~2	1~5	0.9~1.1	1~2

Uses

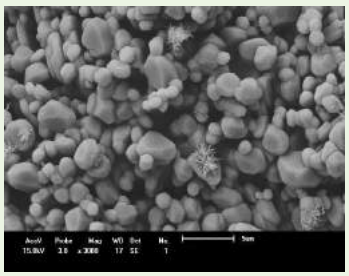
(1) Spark Plug
(2) Electronic Parts
(3) Fine Ceramics
(4) Grinding Tool
(5) Mechanical Parts
(6) Special Refractories
(7) Catalyst Carriers
(8) Glass

Packaging

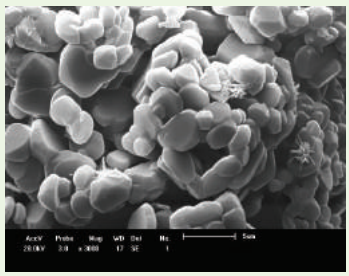
(1) Flexible Container Bag (1,000kg)



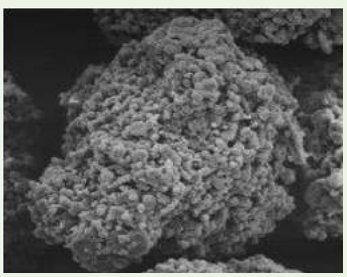
KLS-1N

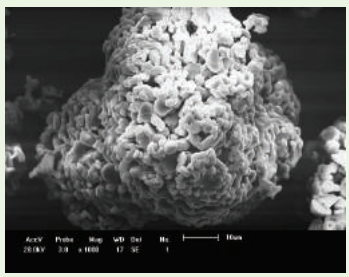


KLS-C2



KLS-5





KES Series (超微粒機能性アルミナ) KA Part

Characteristics

KES series means super fine functional alumina and easily sintered alumina. The raw materials are calcined alumina for sintering and low caustic soda alumina. After the milling process, it is classified into three grades: low, medium and normal caustic soda content. They are widely used for alumina ceramics in the electro-ceramics industry because of its characteristics of heat-resistance, chemical stability, hight strength, abrasion-resistance, electro-insulation, etc.

超微粒機能性アルミナは微粒アルミナ及び易焼結性アルミナとも言い，当社で厳密な焼成管理のもとに生産されたアルミナを原料とし，粉砕工程を経て生産されています．当製品はソーダ含有量によって低ソーダ·中ソーダ·普通ソーダに分けられ，また粒度分布により製品群を分けて生産しています．
耐熱性，化学的安定性，高強度，耐摩耗性，電気絶縁性などの特長を持っているので電子セラミックスからアルミナセラミックスまで幅広く利用されています．

초미립 기능성 알루미나는 미립 알루미나 및 이소결성 알루미나를 말하며 당사에서 생산되는 소결용 소성알루미나와 저소다 알루미나를 원료로 하여 분쇄공정을 거쳐 소다함량에 따라 저소다, 중간소다, 보통소다 초미립 기능성 알루미나로 나누어지며 입도분포에 따라서 제품군을 나누어 생산합니다. 내열성, 화학적안정성, 고강도, 내마모성, 전기절연성 등의 특징을 갖추기 때문에 전자세라믹스 분야에서 알루미나 세라믹스로 다용도로 사용이 되고 있습니다.

Specifications

Product Name		KES-N1	KES-N2	KAM	KES-M1	KLS-51	KES-101LC
Chemical Composition	Al_2O_3 (%)	MIN 99.6	MIN 99.6	MIN 99.6	MIN 99.7	MIN 99.8	MIN 99.6
	Na_2O (%)	MAX 0.30	MAX 0.30	MAX 0.30	MAX 0.20	MAX 0.05	MAX 0.35
	SiO_2 (%)	MAX 0.03	MAX 0.03	MAX 0.03	MAX 0.10	MAX 0.10	MAX 0.03
	Fe_2O_3 (%)	MAX 0.02	MAX 0.02	MAX 0.02	MAX 0.03	MAX 0.03	MAX 0.02
Physical Properties	Dp50 (μm)	0.6~1.0	1.1~1.4	2.5~5.0	0.5~1.0	1.5~1.8	1.1~1.4
	Size of α-crystals (μm)	<1	0.5~4	2~4	<1	1~3	1~2
	Specific Surface Area (m^2/g)	4~7	3~5	0.9~1.5	3~7	1.7~2.0	4~6

Uses

KAM : Refractory, Porcelain
KES - N, M, 101LC Series
(1) High-Density and High-Strength Alumina Porcelain
(2) Industrial Machine Pads
(3) Special Refractories
(4) Electronic Parts
(5) Cutting Tools
(6) Catalyst Support
(7) Polishing Material

Packaging

(1) Flexible Container Bag (1,000kg)
(2) Paper Bag (25kg)