



SUMITOMO CHEMICAL

Creative Hybrid Chemistry
For a Better Tomorrow

Product Databook(Excerpt)

Aluminum Hydroxide



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<Important Notice for Users of this Databook>

- (1) All data in this data book is typical and not guaranteed. The typical properties of all the listed products in this databook are subject to change without prior notice due to continual improvements.
- (2) Applications mentioned in this databook are examples without any guarantee. Fitness for any particular purpose should be verified by customers.
- (3) Please refrain from using products in this databook for medical and food applications.

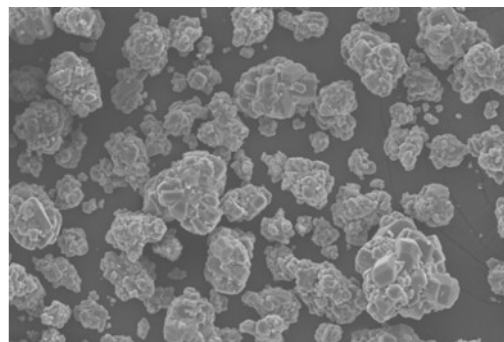
1. Aluminum Hydroxide

Sumitomo Aluminum Hydroxides product portfolio is quite wide to serve diverse industries. Our precipitation process in Bayer Process enables us to fine-tune particle sizes and impurity levels to serve various industries.

Generic Grade

Typical Properties		Product	C-12
Chemical Composition	H2O	[%]	9
	Al(OH)3*	[%]	99.8
	Fe2O3*	[%]	0.01
	SiO2*	[%]	0.01
	Na2O*	[%]	0.18
Loose Bulk Density		[g/cm3]	1.1
Packed Bulk Density		[g/cm3]	1.4
True Specific Gravity			2.42
D50(MT-3300, Laser Diffraction)		[µm]	50
+75µm		[%]	5
Packing	Big Bag		1,000kg

C-12 : Extremely low impurity concentration and small particle size. Excellent reactivity.



C-12

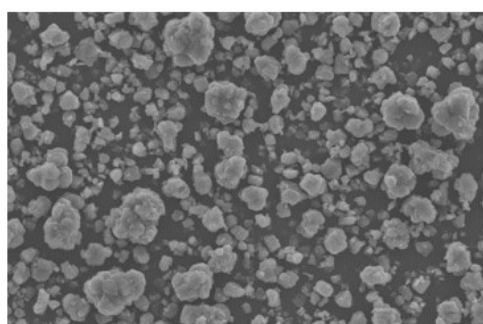
50µm

*Analysis after dried.
Calculated as oxide after analyzing Fe, Si, Na contents.
 $Al(OH)_3 = 100 - (Fe_2O_3 + SiO_2 + Na_2O)$

Fine, Very Fine, Low-Soda

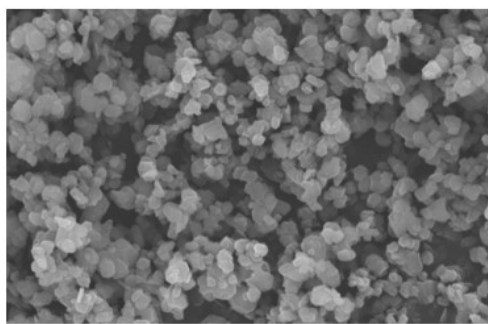
Typical Properties		Product	Fine		Very Fine	Low Soda		
			C-310	C-305	C-301N	CL-310	CL-303	C-302A
Chemical Composition	H2O	[%]	0.05	0.07	0.2	0.04	0.07	0.12
	Al(OH)3*	[%]	99.8	99.8	99.8	99.9	99.9	99.8
	Fe2O3*	[%]	0.01	0.01	0.01	0.01	0.01	0.01
	SiO2*	[%]	0.01	0.01	0.01	0.01	0.01	0.01
	Na2O*	[%]	0.12	0.12	0.2	0.07	0.04	0.11
D50(MT-3300, Laser Diffraction)		[µm]	10	5.5	1.5	12	4	2.4
+45µm		[%]	<0.1	<0.1	<0.1	0.3	<0.1	<0.1
Loose Bulk Density		[g/cm3]	0.7	0.5	0.3	0.7	0.6	0.4
Packed Bulk Density		[g/cm3]	1.3	1.2	0.6	1.3	1.2	0.9
DOA Oil Absorption		[ml/100g]	35	31	54	34	39	39
Whiteness		[%]	-	95	96	92	-	96
BET Specific Surface Area		[m2/g]	1.0	1.5	4	1.1	1.5	2.5
Electric Conductivity**		[µS/cm]	-	-	-	18	20	100
True Specific Gravity			2.42					
Refractive Index			1.57					
Hardness		[Mohs]	3					
Packing	Big Bag		500kg, 1,000kg					
	Paper Bag		25kg					

*Analysis after dried.
Calculated as oxide after analyzing Fe, Si, Na contents.
 $Al(OH)_3 = 100 - (Fe_2O_3 + SiO_2 + Na_2O)$



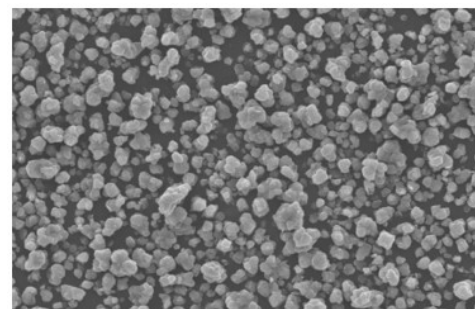
C-305

20µm



C-301N

4µm



CL-303

20µm

High Whiteness

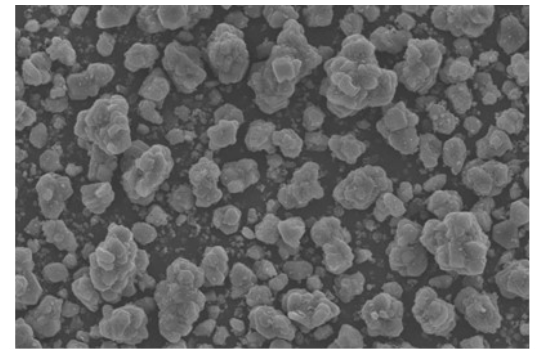
Typical Properties		Product		
		CW-350	CW-308	
Chemical Composition	H2O	[%]	0.03	0.06
	Al(OH)3*	[%]	99.9	99.8
	Fe2O3*	[%]	0.01	0.01
	SiO2*	[%]	0.01	0.01
	Na2O*	[%]	0.06	0.17
D50(MT-3300, Laser Diffraction)		[µm]	43	10
+45µm		[%]	-	<0.1
Loose Bulk Density		[g/cm3]	1.0	0.6
Packed Bulk Density		[g/cm3]	1.4	1.3
DOA Oil Absorption		[ml/100g]	29	34
True Specific Gravity			2.42	
Refractive Index			1.57	
Hardness		[Mohs]	3	
Packing	Big Bag		500kg, 1,000kg	
	Paper Bag		-	25kg

*Analysis after dried.
 Calculated as oxide after analyzing Fe, Si, Na contents.
 $Al(OH)_3 = 100 - (Fe_2O_3 + SiO_2 + Na_2O)$

Impart tone and transparency to artificial marbles / plastics when added as a filler.

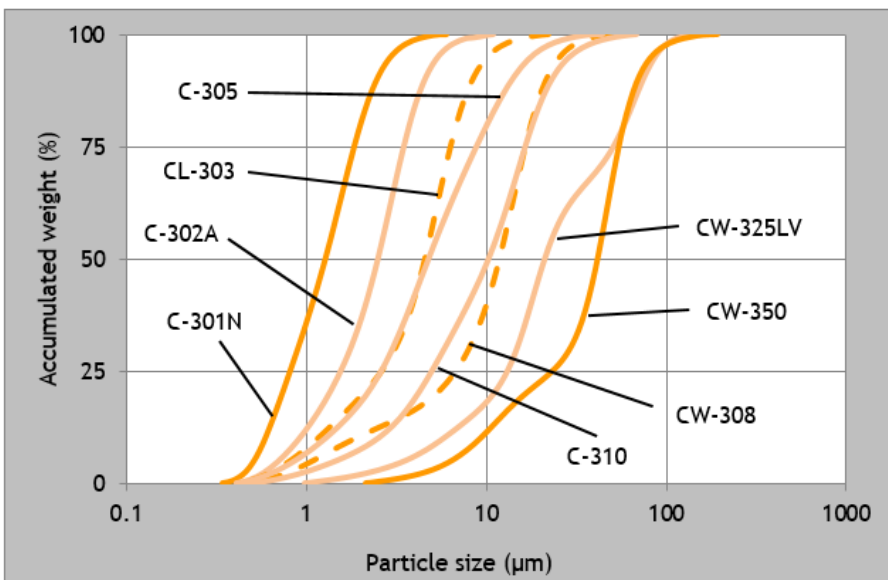
High Whiteness (Surface Treated)

Typical Properties		Product			
		CW-350B	CWL-325J	CW-308B	
Chemical Composition	H2O	[%]	0.03	0.05	0.05
	Al(OH)3*	[%]	99.9	99.7	99.7
	Fe2O3*	[%]	0.01	0.01	0.01
	SiO2*	[%]	0.04	0.15	0.12
	Na2O*	[%]	0.05	0.07	0.15
D50(MT-3300, Laser Diffraction)		[µm]	51	20	10
DOA Oil Absorption		[ml/100g]	28	22	32
True Specific Gravity			2.42		
Refractive Index			1.57		
Hardness		[Mohs]	3		
Packing	Big Bag		500kg, 1,000kg		
	Paper Bag		-	25kg	



CW-308

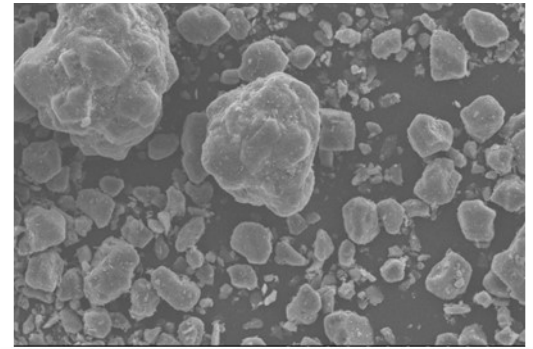
20µm



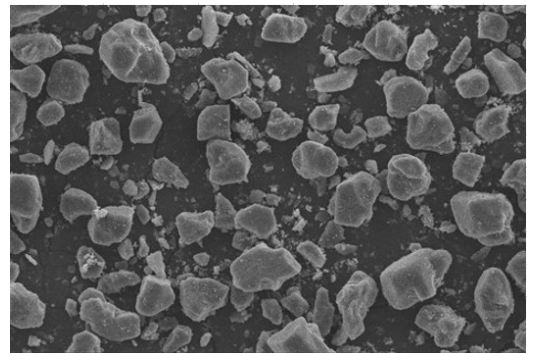
Low Viscosity

Typical Properties		Product	CW-325LV	CW-320LV	CW-310LV
Chemical Composition	H2O	[%]	0.04	0.04	0.05
	Al(OH)3*	[%]	99.9	99.9	99.9
	Fe2O3*	[%]	0.01	0.01	0.01
	SiO2*	[%]	0.00	0.00	0.00
	Na2O*	[%]	0.07	0.08	0.06
D50(MT-3300, Laser Diffraction)	[μm]	21	17	10	
+45μm	[%]	-	-	-	
BET Specific Surface Area	[m2/g]	0.8	1.1	1.7	
Electric Conductivity	[μS/cm]	20	20	20	
Loose Bulk Density	[g/cm3]	1.0	0.8	0.7	
Packed Bulk Density	[g/cm3]	1.4	1.5	1.4	
DOA Oil Absorption	[ml/100g]	24	27	28	
True Specific Gravity			2.42		
Refractive Index			1.57		
Hardness	[Mohs]		3		
Packing	Big Bag		1,000kg		
	Paper Bag		25kg		

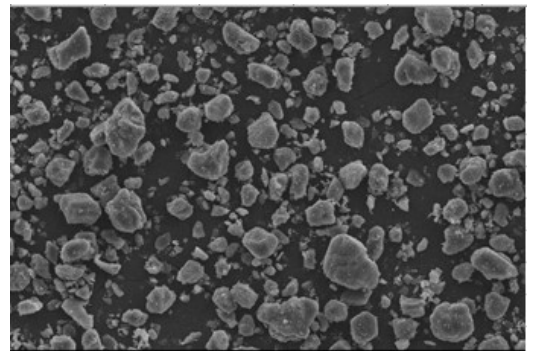
*Analysis after dried.
 Calculated as oxide after analyzing Fe, Si, Na contents.
 $Al(OH)_3 = 100 - (Fe_2O_3 + SiO_2 + Na_2O)$



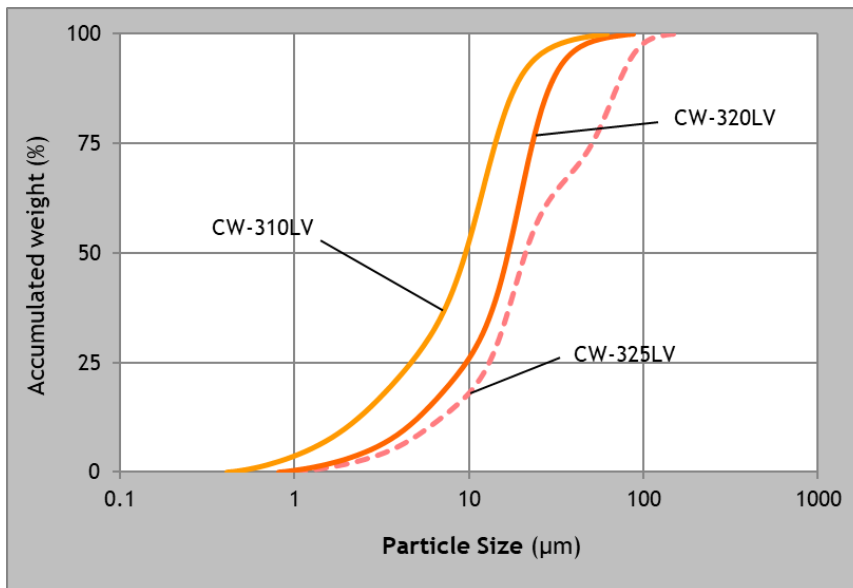
CW-325LV



CW-320LV



CW-310LV



Click the movie to learn viscosity performance difference between each product.

<Test Conditions>

Observed the compound's behavior 100 seconds while pressing with 50g weight.

Aluminum Hydroxide: 60vol%

Resin: Silicone

Compound Volume: 1.5g

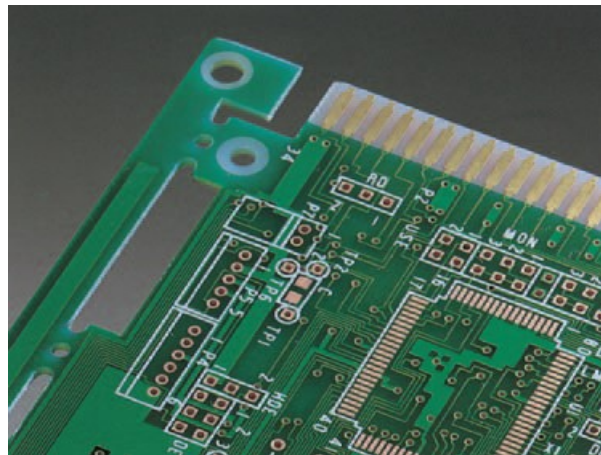
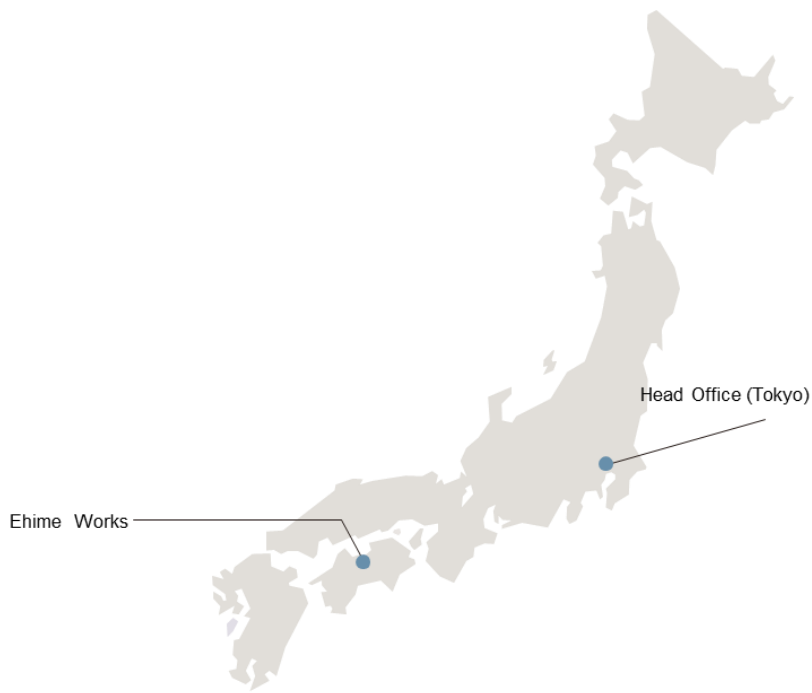
Weight: 50g

<Movie Operating Conditions>

PC only.

Download this PDF file necessary.

Plant & Office Location / Contact




Aluminum Hydroxide as a flame retardant for CCL.



Aluminum Hydroxide as a filler for solid surface.

CONTACTS for Sales and Technical Information

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