

# Higher Purity Calcined and Reactive Aluminas

## Extra Low Soda (XLS) Products

Unground				
Chemical Composition	Unit		CT 1200 XLS	CL 2500 XLS
Al <sub>2</sub> O <sub>3</sub> by difference	[%]		> 99.8	> 99.8
Na <sub>2</sub> O	[%]		≤ 0.03	≤ 0.03
Fe <sub>2</sub> O <sub>3</sub>	[%]		≤ 0.03	≤ 0.025
SiO <sub>2</sub>	[%]		≤ 0.03	≤ 0.03
CaO	[%]		≤ 0.03	≤ 0.03
B <sub>2</sub> O <sub>3</sub>	[%]		≤ 0.03	≤ 0.02
Properties / Method (Typical)				
Specific Surface Area BET	[m <sup>2</sup> /g]		1.2	0.9
[Primary Crystal Size D50*]**	[μm]			1.7
Particle Size Wet Sieve > 63 μm	[%]		75	80
Green Density	[g/cm <sup>3</sup> ]			2.22
Superground				
Chemical Composition	Unit	CT 3000 XLS SG†	CT 1200 XLS SG†	CL 2500 XLS SG
Al <sub>2</sub> O <sub>3</sub> by difference	[%]	> 99.8	> 99.8	> 99.8
Na <sub>2</sub> O	[%]	≤ 0.03	≤ 0.03	≤ 0.03
Fe <sub>2</sub> O <sub>3</sub>	[%]	≤ 0.02	≤ 0.03	≤ 0.025
SiO <sub>2</sub>	[%]	≤ 0.028	≤ 0.04	≤ 0.03
CaO	[%]	≤ 0.02	≤ 0.03	≤ 0.03
B <sub>2</sub> O <sub>3</sub>	[%]	≤ 0.005	≤ 0.03	≤ 0.02
Properties / Method (Typical)				
Specific Surface Area BET	[m <sup>2</sup> /g]	7.8	3	1
Particle Size D50*	[μm]	0.55	1.3	3.5
Particle Size D90*	[μm]	1.7	2.9	
Particle Size Wet Sieve > 20μm	[%]			2
Green Density	[g/cm <sup>3</sup> ]	2.25	2.32	
Fired Density	[g/cm <sup>3</sup> ]	3.91	3.92	
Firing Temperature / 1 h Soak Time	[°C]	1540	1670	
Shrinkage	[%]	16.8	16	

All data are based upon Almatis standard test methods. All test methods are available upon request.

The typical properties are based upon the actual averages from production data.

\* Laser granulometry Bettersizer S3 Almatis global standard

\*\* After lab grind

† Product available with and w/o MgO addition



# Higher Purity Calcined and Reactive Aluminas

## Ultra Low Soda (ULS) Products

Unground					
Chemical Composition	Unit		CT 1200 ULS	CL 2500 ULS	CL 3000 ULS
Al <sub>2</sub> O <sub>3</sub> by difference	[%]		> 99.9	> 99.9	> 99.9
Na <sub>2</sub> O	[%]		≤ 0.01	≤ 0.01	≤ 0.01
Fe <sub>2</sub> O <sub>3</sub>	[%]		≤ 0.02	≤ 0.02	≤ 0.02
SiO <sub>2</sub>	[%]		≤ 0.01	≤ 0.01	≤ 0.01
CaO	[%]		≤ 0.01	≤ 0.01	≤ 0.01
B <sub>2</sub> O <sub>3</sub>	[%]		≤ 0.005	≤ 0.005	≤ 0.01
Properties / Method (Typical)					
Specific Surface Area BET	[m <sup>2</sup> /g]		1.2	0.95	0.6
[Primary Crystal Size D50*]**	[μm]			1.7	2.2
Particle Size Wet Sieve >63 μm	[%]		75	80	80
Green Density	[g/cm <sup>3</sup> ]			2.22	2.28
Superground					
Chemical Composition	Unit	CT 3000 ULS SG†	CT 1200 ULS SG†	CL 2500 ULS SG	CL 3000 ULS SG
Al <sub>2</sub> O <sub>3</sub> by difference	[%]	> 99.9	> 99.9	> 99.9	> 99.9
Na <sub>2</sub> O	[%]	≤ 0.01	≤ 0.01	≤ 0.01	≤ 0.01
Fe <sub>2</sub> O <sub>3</sub>	[%]	≤ 0.02	≤ 0.02	≤ 0.02	≤ 0.02
SiO <sub>2</sub>	[%]	≤ 0.02	≤ 0.02	≤ 0.01	≤ 0.01
CaO	[%]	≤ 0.015	≤ 0.015	≤ 0.01	≤ 0.01
B <sub>2</sub> O <sub>3</sub>	[%]	≤ 0.005	≤ 0.005	≤ 0.005	≤ 0.01
Properties / Method (Typical)					
Specific Surface Area BET	[m <sup>2</sup> /g]	7	3	1.2	1
Particle Size D50*	[μm]	0.55	1.3	3.5	3.7
Particle Size D90*	[μm]	1.7	2.9		
Particle Size Wet Sieve > 20μm	[%]			2	0.1
Green Density	[g/cm <sup>3</sup> ]	2.22	2.30		
Fired Density	[g/cm <sup>3</sup> ]	3.91	3.92		
Firing Temperature / 1 h Soak Time	[°C]	1540	1670		
Shrinkage	[%]	17	16		

The typical properties are based upon the actual averages from production data.

All data are based upon Almatris standard test methods. All test methods are available upon request.

\* Laser granulometry Battersizer S3 Almatris global standard

\*\* After lab grind

† Product available with and w/o MgO addition.

# Higher Purity Calcined and Reactive Aluminas

## Ultra Low Soda (ULS) Products

### Standard Packaging

- 25kg paper bags
- 1000 kg big bag, discharge sleeve and shrink wrapped.

Contact for sales, technical information and application assistance

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**SDS 387**