

# ALUNABEADS™ CB SERIES

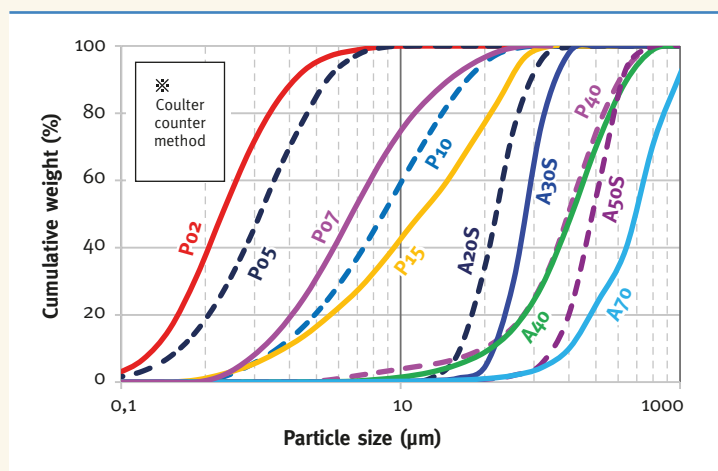
## Typical properties of common grades

			CB -P02	CB -P05	CB -P07	CB -P10	CB -P15	CB -A20S	CB -A30S	CB -A40	CB -P40	CB -A50S	CB -A70	CB -A100S
Chemical Composition	L.O.I** <sup>1</sup>	%	0.06	0.05	0.07	0.05	0.04	0.03	0.03	0.02	0.05	0.02	0.02	0.02
	Fe <sub>2</sub> O <sub>3</sub>	%	0.04	0.02	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.01
	SiO <sub>2</sub>	%	0.06	0.03	0.02	0.02	0.06	0.02	0.01	0.05	0.01	0.01	0.04	0.01
	Na <sub>2</sub> O	%	0.02	0.01	0.19	0.07	0.06	0.03	0.01	0.01	0.07	0.01	0.06	0.02
	Na <sup>+</sup> ** <sup>2</sup>	ppm	5	4	17	5	6	10	8	7	20	6	30	5
	Al <sub>2</sub> O <sub>3</sub>	%	99.82	99.89	99.71	99.85	99.82	99.91	99.94	99.91	99.86	99.92	99.89	99.94
Mean Particle Size (d <sub>50</sub> )** <sup>3</sup>	µm	2	4	7	8	16	21	28	40	44	50	71	94	
Top cut size	µm	24	24	45	24	45	45	45	88	88	88	149	149	
BET Specific Surface area	m <sup>2</sup> /g	1.1	0.7	0.6	0.6	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
Bulk Density	Loose	g/cm <sup>3</sup>	1.1	1.3	1.5	1.7	1.7	2.1	2.1	2.2	2.2	2.1	2.1	2.2
	Tap	g/cm <sup>3</sup>	1.9	2.2	2.4	2.5	2.5	2.3	2.3	2.3	2.5	2.3	2.4	2.5
Electric Conductivity** <sup>4</sup>	µS/cm	8	9	11	6	8	7	6	7	74	4	24	5	
Viscosity (Pas)	Epoxy resin (250PHR)		142	130	-	85	76	116	117	138	88	99	105	-
	Silicone resin (600PHR)		305	274	-	123	73	104	90	100	70	77	57	-

\*\*1 Loss On Ignition, \*\*2 Warm water extraction (100°C, 2Hr), \*\*3 LASER DIFFRACTION AND SCATTERING METHOD ANALYZER

\*\*4 20g/100ml purified water, \*\*The data shown above are representative figures. They are not guaranteed values.

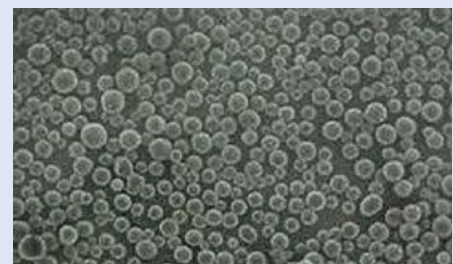
### Particle Size Distribution



### SEM images



CB-P40



CB-A20S

### Features and Advantages

- Spherical shape allows for especially high filling into resin. It is especially suitable for applications which require high fluidity.
- CB-A20S and CB-A50S grades have a sharp particle size distribution, while CB-A40, CB-A70, CB-P02, and CB-P40 grades have a broad particle size distribution.
- Alunabeads™ CB Series has good properties for special abrasives in addition to insulation and thermal filler applications.