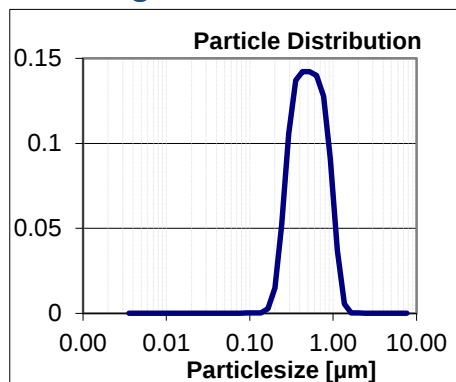
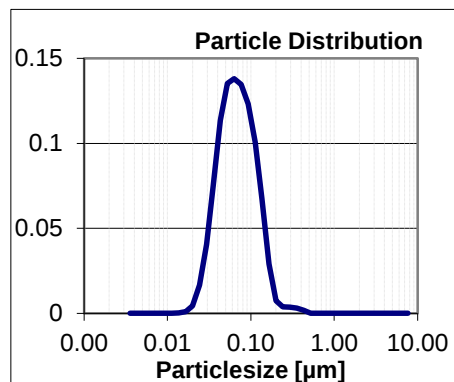


DS-1 Measurement Accuracy

◆ Large Particle

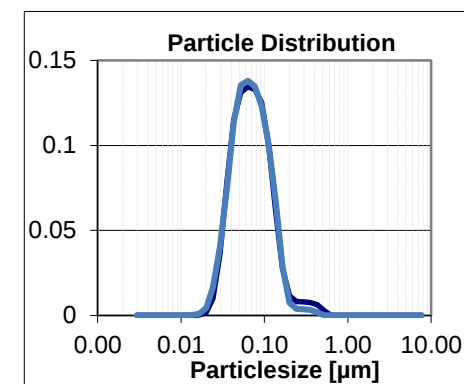


◆ Small Particle



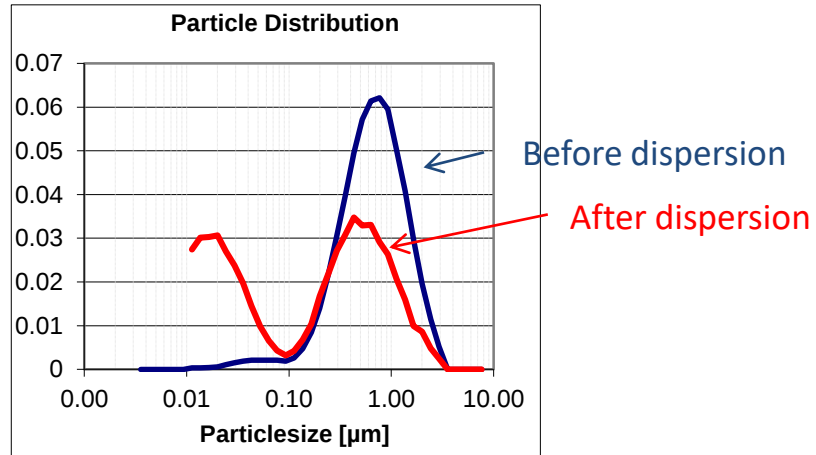
A) Theoretical Value (μm)	0.600	0.077
B) Measured D50 (μm)	0.599	0.081
Difference between A) and B)	0.001	0.004

DS-1 Measurement Repeatability



D50 (μm) n=1	0.0815
D50 (μm) n=2	0.0800
C.V. (%)	1.3%

Re-Dispersion evaluation



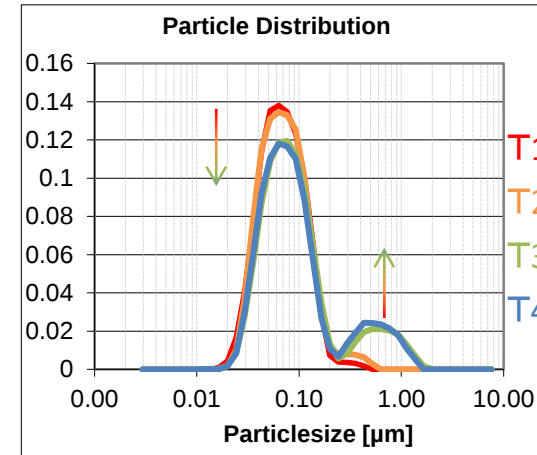
Experiment : Performed measurement after redispersing agglomerated sample

Result : >Before dispersion:
Distribution was observed around 0.9 μm.

>After dispersion:
The peak around 0.9 μm became small and the another peak appeared around 0.02 μm.

Examination: From the above result, we can understand that the size of agglomerates became fine because of redispersion

Time dependent change evaluation

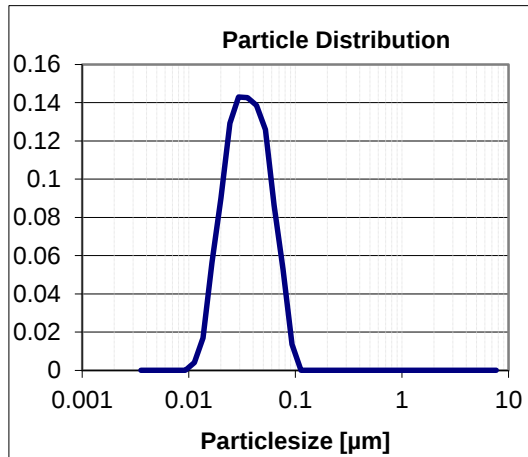


Experiment : Performed measurement changing the settling time of the agglomerating sample

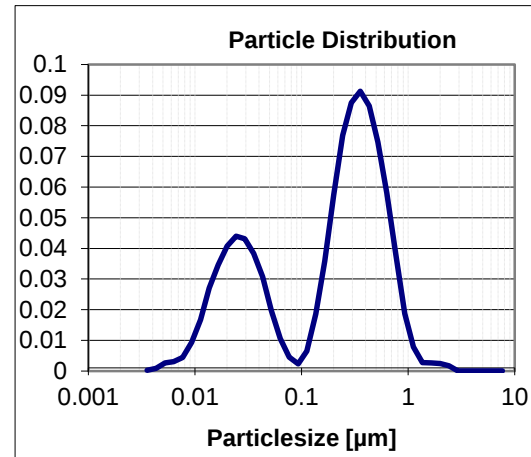
Result : The peak around 0.08 μm decreased over time, on the other hand, the peak around 0.6 μm increased.

Examination: We can know that particles agglomerated over time.

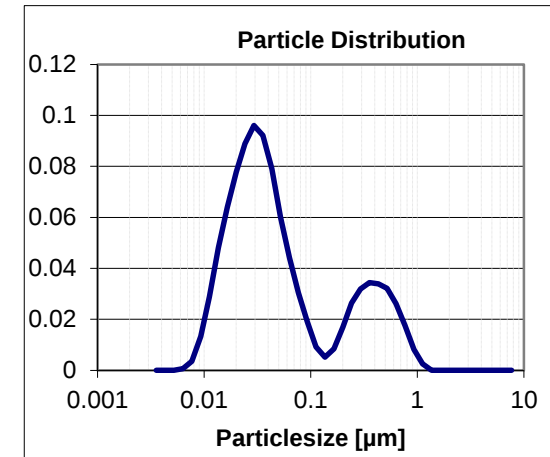
◆ Colloidal silica



◆ Barium titanate

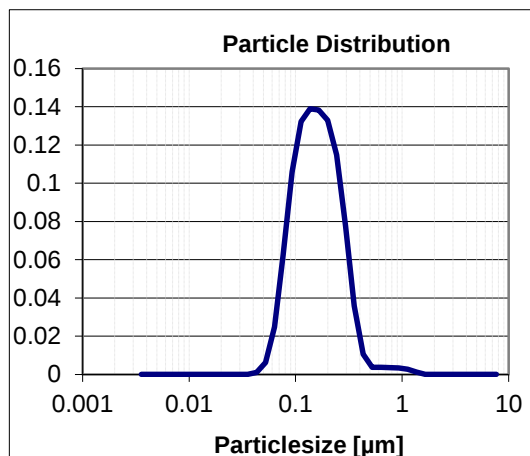


◆ Aluminum oxide

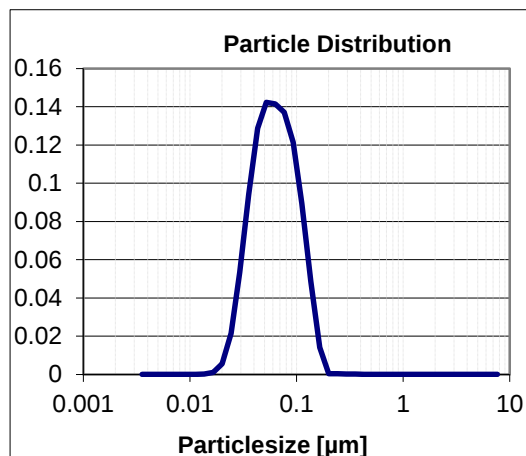


Particle Size (μm)	0.043	0.44	0.435
Concentration (vol%)	23	5	2.5
Material	Colloidal silica	Barium titanate	Aluminum oxide
Application Examples	Paper/Fiber/Battery/Catalyst Binder/Coating material/Abrasive	Laminated Ceramic Capacitor / Filler	Abrasive/ Catalyst / Electronic Parts
Material Manufacturers	Nissan Chemical/JGC Catalysts and Chemicals/ Fuso Chemical/ Tama Chemicals	Fuji Titanium/ KCM Corp., Nippon Chemical	Showa Denko / Nippon Light Metal / Denka / Nippon Steel & Sumikin Materials / Sumitomo Chemical

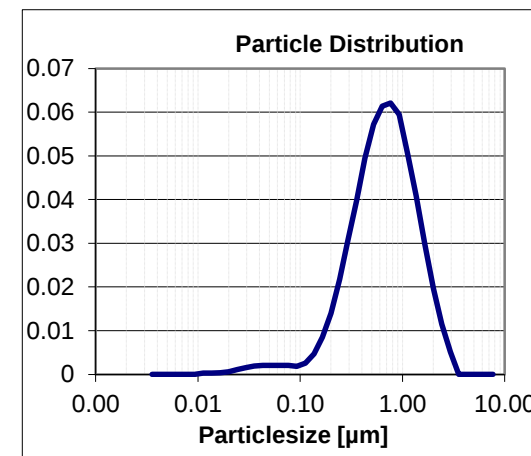
◆ Silica



◆ Iron oxide

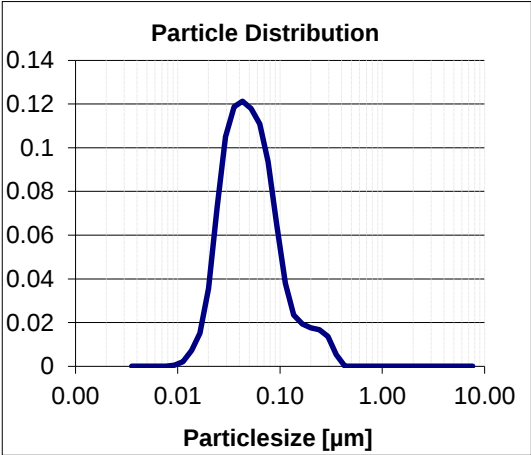


◆ Titanate oxide



Particle Size (μm)	0.15	0.074	0.96
Concentration (vol%)	10	1	1
Material	Silica abrasive	Iron oxide	Titanate oxide
Application Examples	Paint / Matting agent / Resin film / Cosmetics / Carrier(Medicine / Flavor) / Abrasive	Pigment / Toner / Magnetic tape / Ferrite / Cosmetics	Paint / Printing ink / Cosmetics / Electronic materials
Material Manufacturers	Admatechs / Fuji Silysia Chemical / Tosoh Silica	Toda Kogyo / JFE Chemical / Titan Kogyo / Tetsugen	Ishihara Sangyo Kaisha / Titan Kogyo / Sakai Chemical

◆ Cellulose



Particle Size (μm)	0.04		
Concentration (vol%)	10		
Material	Cellulose		
Application Examples	Cosmetics / Thickener		
Material Manufactures			

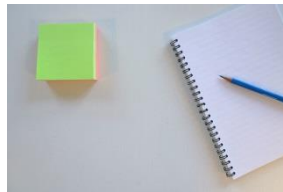
Titanate oxide



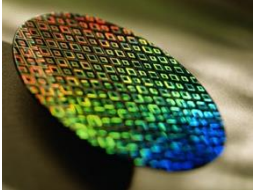
Barium titanate



Colloidal silica



Aluminum oxide



Iron oxide

