

■ Battery materials

→ The active materials for lithium ion batteries
Lithium titanate spinel (LTO)

Model No.

SCT-2FJ



■ Characteristic

Under development

- ◆ Fine particles
 - $D_{50} \approx 1\mu\text{m}$
- ◆ Narrow particle size distribution
- ◆ Possible to charge and discharge at 10C rate

■ Advantages of electrode

- ◆ Easy thin electrode processing

■ Powder properties

	Units	Tentative data
Specific Surface Area (SSA)	m_2/g	3.1
Bulk Density (B.D.)	g/cc	0.3
Tap Density (T.D.)	g/cc	0.9
Particle size (D_{50} , D_{100})	μm	$D_{50}=1.4$, $D_{100}=5.2$
Purity	%	99.6

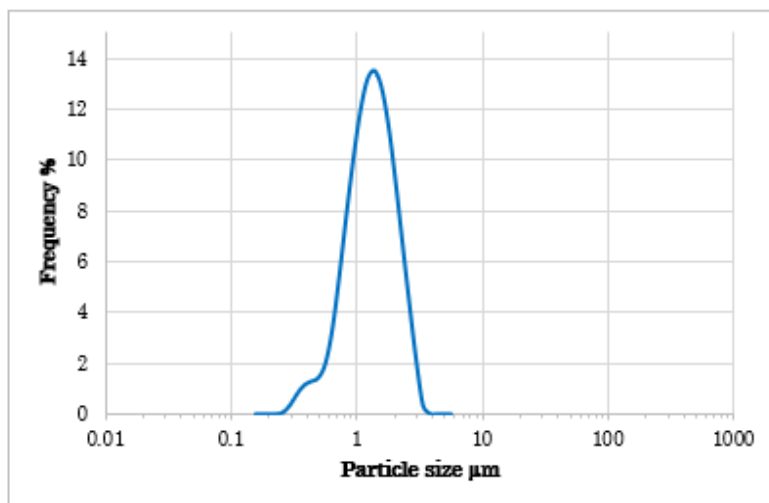
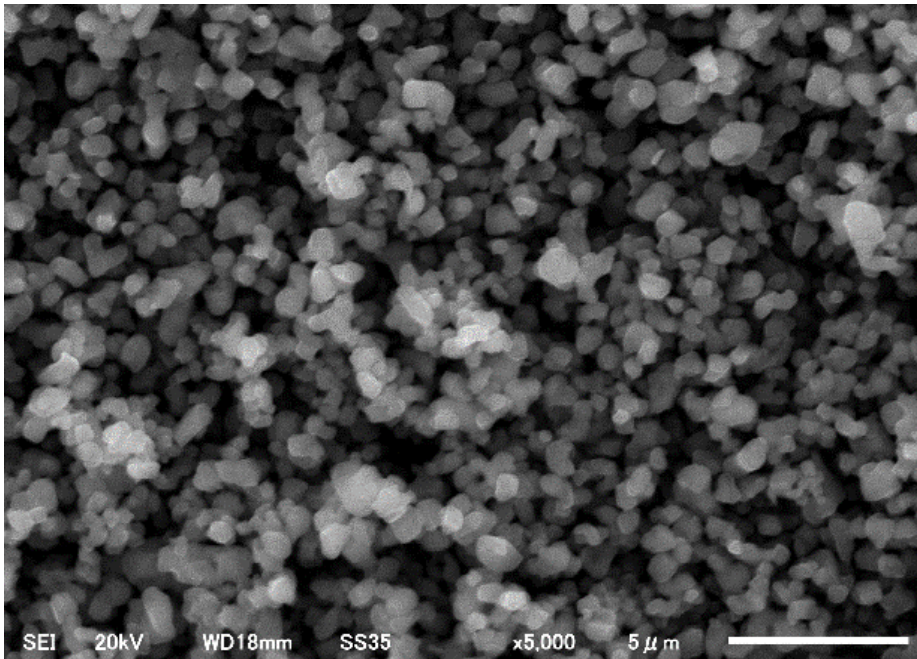


Fig1. Particle size distribution

SEM image



● Crystallite size : 200nm~1μm

Charge and Discharge Performance

Electrode Configuration

SCT-2FJ : A.B. : PVdF
= 90 : 5 : 5

Cell configuration

Cell : HS cell
Anode : Li
Electrolytic solution : 1M LiPF₆ / EC+DMC

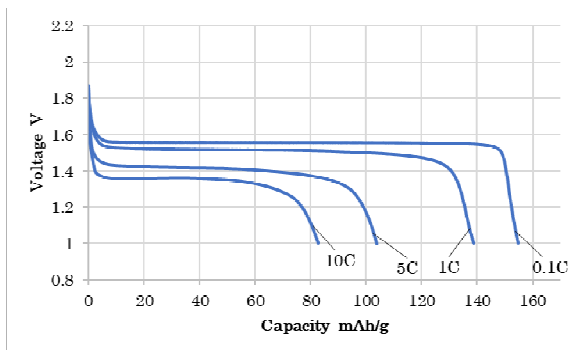


Fig2. Charge Rate Performance

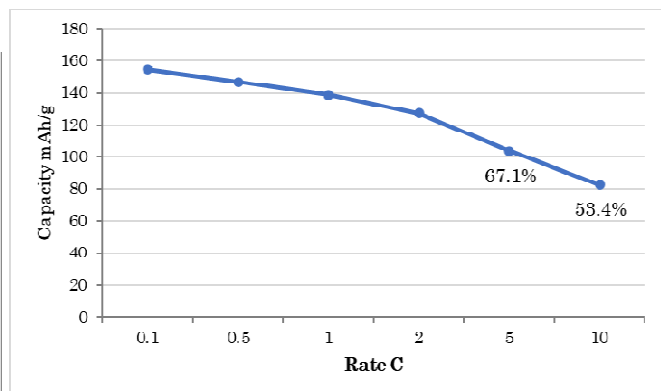


Fig3. Charge Rate vs Capacity