

■ Battery materials

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

Model No.

SCT-2FJ



■ Characteristic

◆ 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 (D50 , D100) | μm | $D_{50}=1.4$, $D_{100}=5.2$ |
| Purity | % | 99.6 |

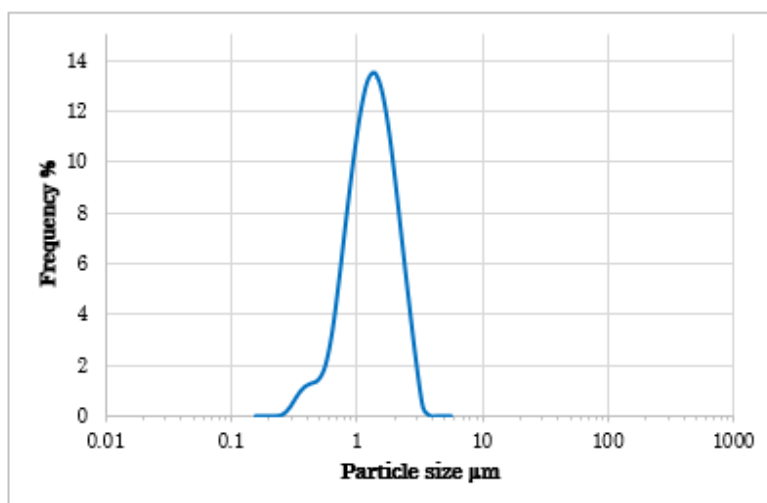
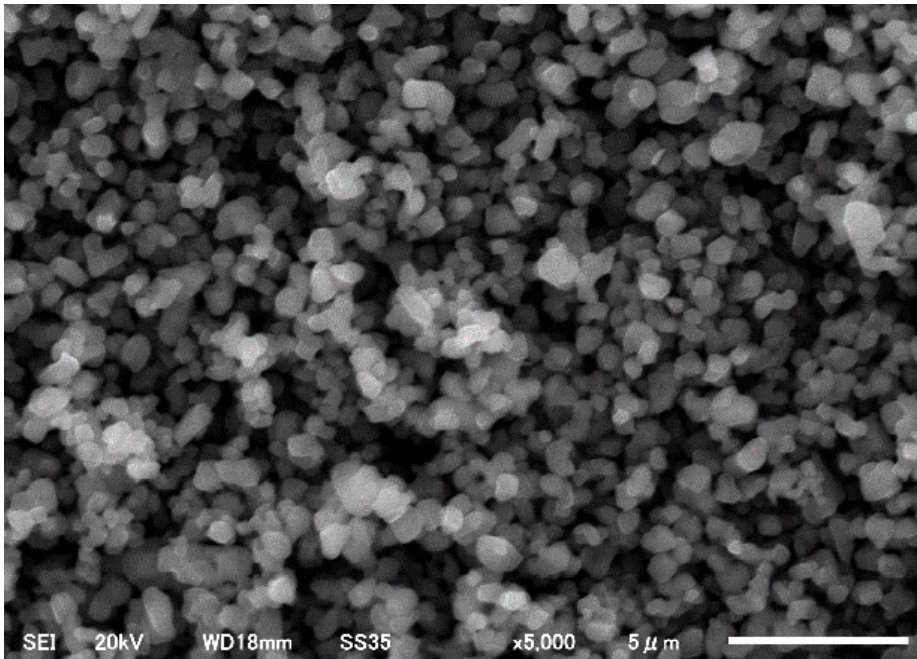


Fig1. Particle size distribution

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

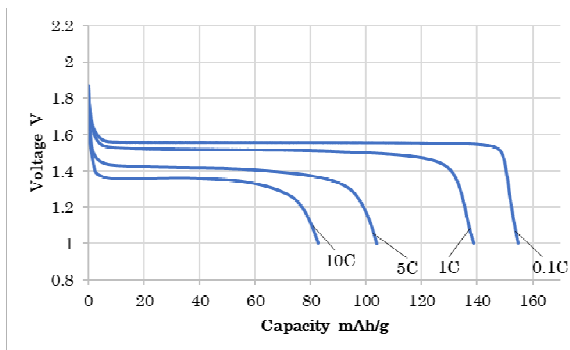


Fig2. Charge Rate Performance

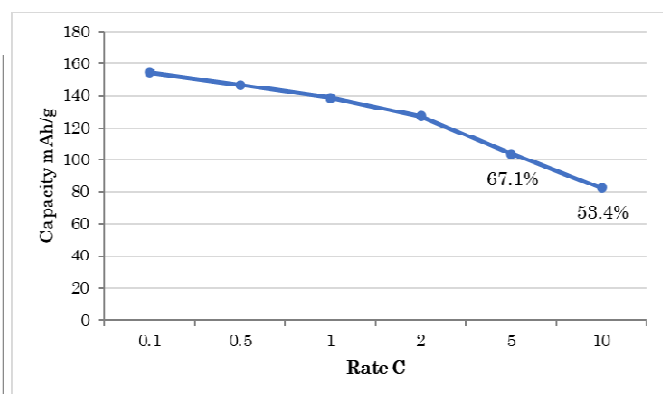


Fig3. Charge Rate vs Capacity