

■ Battery materials

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

In production

Mass production since 2019 We have delivery record of several dozens of tons

Model No. SCT-1



■ Characteristic

◆ High drain

- High capacity retention at 10C rate

◆ Easy electrode processing

- Easy slurry processing due to the dense particles.
- Solid ratio more than 50%.

◆ High purity

- LTO > 99%

■ Advantages of electrode

Superior charge and discharge characteristic at 10C

■ Powder properties

	Units	Specification area	Sample data
Specific Surface Area (SSA)	m ² /g	5~7	5.5
Bulk Density (B.D.)	g/cc	0.3~0.6	0.4
Tap Density (T.D.)	g/cc	0.9~1.2	1.0
Particle size (D ₅₀ , D ₁₀₀)	μm	D ₅₀ =5~15, D ₁₀₀ < 40	D ₅₀ =8.1, D ₁₀₀ =33.3
Purity	%	> 98	99.8
Water content	%	< 0.3	0.24

■ XRD pattern

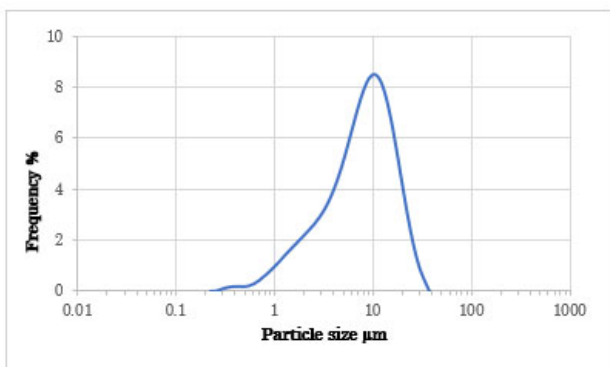


Fig1. Particle size distribution

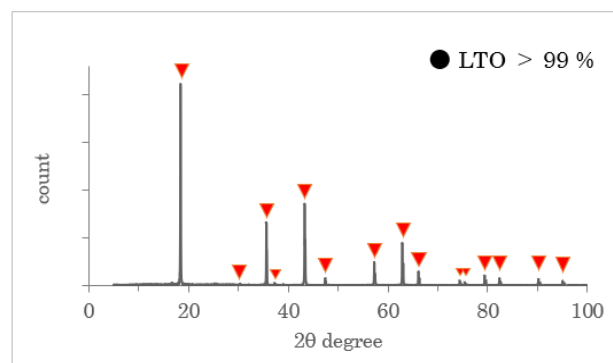
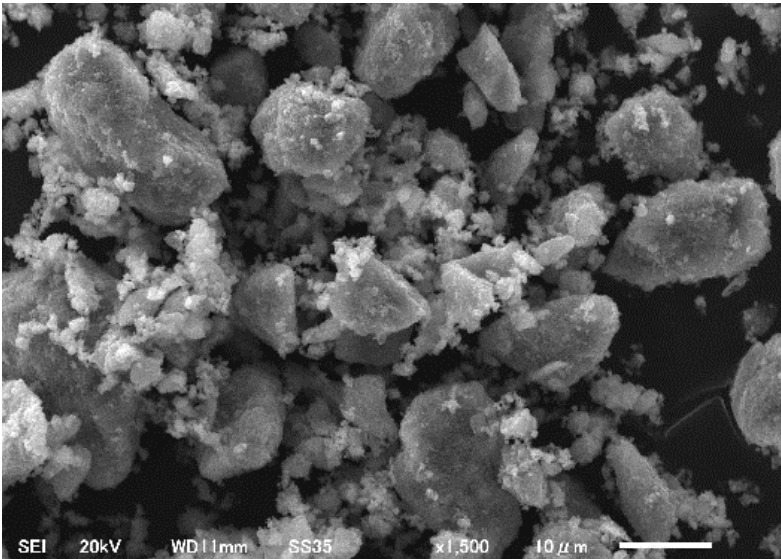


Fig2. X-ray diffraction pattern

SEM image



- Shape : Granular
- Crystallite size : 110~150nm

Charge and Discharge Performance

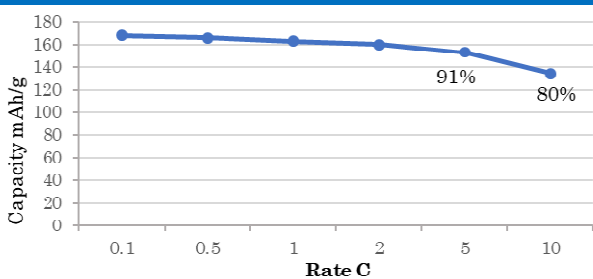
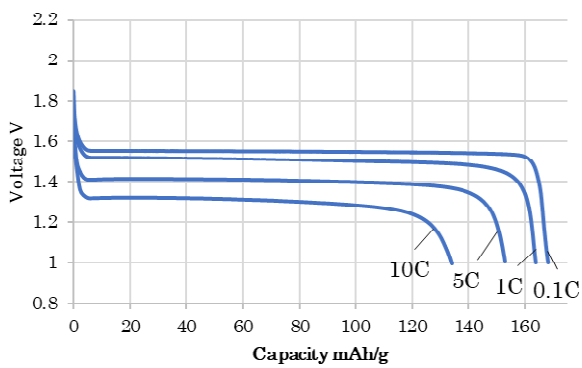
Electrode Configuration

SCT-1 : A.B. : PVdF
= 90 : 5 : 5

Cell configuration

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

Charge rate performance as anode



Discharge rate performance as anode

