GUIZHOU CHANHEN CHEMICAL CORPORATION
Longchang Town, Fuquan City, Guizhou Province, China 550599

WF07 Energy Storage LFP

Product Specification

1.Basic Information

Energy Storage LFP product, type WF07.

2. Product Characteristics

WF07 Energy Storage LFP, the capacity of the full battery at 0.5C discharging rate is above 145 mAh/g, discharge capacity retention rate is above 80% after 6000 cycles. The product has excellent processing quality. The material is mainly used in energy storage and low-speed vehicle power batteries.

3. Physicochemical Properties

Subjects			Unit	Specification	Typical Value	Testing Methods
Physical Indicators	Particle-size distribution	D_{10}	μm	≥0.4	0.52	GB/T 19077.1 Malvern Laser Particle Size Analyzer
		D_{50}		1.0±0.3	0.975	
		D_{90}		≤8.0	6.38	
		D_{99}		≤12	10.6	
	SSA		m^2/g	11±2	11.01	GB/T 13390 SSA Analyzer
	Tap Density		g/cm^3	1.0±0.2	0.98	GB/T 5162 Autotap
	Powder Compaction Density		g/cm^3	≥2.40	2.41	Suntest-UTM7305 (3T test)
	Moisture		ppm	≤1000	540	Karl Fischer Titrators
	Resistivity		Ω·cm	≤30	11.5	Semiconductor Powder Resistivity Tester
Chemical Indicators	Li		%	4.3±0.3	4.42	ICP
	Fe		%	33.5-35.0	34.16	Potassium Dichromate Method
	P		%	19.0-21.0	19.68	Quinomolidone Precipitation Method
	C		%	1.3±0.2	1.32	Carbon and Sulfur Analyzer
	pH		/	9±1	8.65	pH Meter
	Magnetic Substance		ppb	≤1000	150	Magneton Adsorption Method ICP
	Magnetic Metal Particle Number		Pcs/kg	≤95	57	Cleanliness Tester
	Trace Element	Na+K	ppm	≤300	158	ICP
		Ca		≤100	1	
		Mg		≤100	13	
		Al		≤100	27	
		Pb		≤100	8	
		Co		≤100	10	
		Mn		≤150	12	

GUIZHOU CHANHEN CHEMICAL CORPORATION

Longchang Town, Fuquan City, Guizhou Province, China 550599

		Ni		≤50	6	
		Cr		≤50	6	
		Cu		≤50	1	
		Zn		≤50	5	

4. Electrochemical Performance

Subjects	Unit	Standard Value	Typical Value	Testing Methods	
Initial Charge Capacity	mAh/g	≥160	162.5	2.0-3.75V 0.1C/0.1C	2025 Button half cell
Initial Discharge Capacity	mAh/g	≥156	158.1		
Initial Coulombic Efficiency	%	≥95	97.3		

5. Materials Storage, Transportation and Expiry Date

Storage：sealed, place in shade; temperature≤40℃, relative humidity≤80%；avoid mechanical damage, chemical corrosion and thermal pollution.

Transportation: avoid moisture and package damage.

Expiry date: 12 months.

6. Packaging and Product Identification

6.1 Package

6.1.1 Package Material: inside aluminum foil bag, outside carton; or packaging with jumbo bag according to customer demand

6.1.2 Packing weight: 20kg/ case or customer-specified weight

6.1.3 Packaging requirements: sealed air-tight aluminum foil bag

6.1.4 Package and transportation protection: Moisture-proof and shock-proof are needed

6.2 Identification

Product identification requirements: clear package identification, and include the following content：Product name, model, production date, lot number, company name.