

# GUIZHOU CHANHEN CHEMICAL CORPORATION

Longchang Town, Fuquan City, Guizhou Province, China 550599

## WF01 Capacity Cell Grade LFP

### Product Specification

#### 1. Basic Information

Capacity cell LFP product, type WF01.

#### 2. Product Characteristics

WF01 capacity cell grade 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 material has excellent processing performance, being 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 <sub>10</sub>	≥0.4	0.52	GB/T 19077.1 Malvern Laser Particle Size Analyzer	
		D <sub>50</sub>	1.0±0.3	0.975		
		D <sub>90</sub>	≤8.0	6.38		
		D <sub>99</sub>	≤12	10.6		
	SSA		m <sup>2</sup> /g	11±2	11.01	GB/T 13390 SSA Analyzer
	Tap Density		g/cm <sup>3</sup>	1.0±0.2	0.98	GB/T 5162 Autotap
	Powder Compaction Density		g/cm <sup>3</sup>	≥2.32	2.33	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		%	1.4±0.2	1.47	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				

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		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°C, 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.