

GUIZHOU CHANHEN CHEMICAL CORPORATION

Longchang Town, Fuquan City, Guizhou Province, China 550599

WF09 Type LFP Product Specification

1. Basic Information

High density LFP product, type WF09.

2. Product Characteristics

WF09 LFP, the capacity of the full battery at 0.5C discharging rate is above 145 mAh/g at 25 °C , discharge capacity retention rate is above 80% after 6000 cycles. The product has excellent processing quality and high compaction density property.

3. Physicochemical Properties

Subjects		Unit	Specification	Typical Value	Testing Methods	
Physical Indicators	Particle-size distribution	D ₁₀	≥0.35	0.41	GB/T 19077.1 Malvern Laser Particle Size Analyzer	
		D ₅₀	1.2±0.3	1.24		
		D ₉₀	≤8.0	5.68		
		D ₉₉	≤12	10.5		
	SSA		m ² /g	13±2	13.14	GB/T 13390 SSA Analyzer
	Tap Density		g/cm ³	1.0±0.2	1.03	GB/T 5162 Autotap
	Powder Compaction Density		g/cm ³	≥2.50	2.51	Suntest-UTM7305 (3T test)
	Moisture		ppm	≤800	438	Karl Fischer Titrators
Resistivity		Ω·cm	≤35	17.66	Semiconductor Powder Resistivity Tester	
Chemical Indicators	Li		%	4.3±0.3	4.50	ICP
	Fe		%	33.5-35.0	34.21	Potassium Dichromate Method
	P		%	19.0-21.0	19.65	Quinomolidone Precipitation Method
	C		%	1.4±0.2	1.42	Carbon and Sulfur Analyzer
	pH		/	9±1	8.59	pH Meter
	Magnetic Substance		ppb	≤750	150	Magneton Adsorption Method ICP
	Magnetic Metal Particle Number		Pcs/kg	≤95	26	Cleanliness Tester
	Trace Element	Na+K	ppm	≤300	115.6	ICP
Ca		≤100		2.53		
Mg		≤100		22.23		
Al		≤100		30.36		
Pb		≤100		6.90		
Co		≤100		2.35		
Mn		≤150		16.70		

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		Ni		≤50	0.01	
		Cr		≤50	5.46	
		Cu		≤50	0.00	
		Zn		≤50	5.61	

4. Electrochemical Performance

Subjects	Unit	Standard Value	Typical Value	Testing Methods	
Initial Charge Capacity	mAh/g	≥160	161.95	2.0-3.75V at 25°C 0.1C/0.1DC	2025 Button half cell
Initial Discharge Capacity	mAh/g	≥156	158.30		
Initial Coulombic Efficiency	%	≥96	97.74		

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.