



Address: East of Tianmu Road, Laiyang Development  
Zone, Yantai City, Shandong Province, 265200, China

## Certificate of Analysis

Product Name: D-Chiro Inositol Powder	CAS No.: 643-12-9
Formula: $C_6H_{12}O_6$	Formula Weight: 180.16
Production Date: June 3, 2025	Batch No.: S20250603
Expiry Date: June 2, 2027	Batch Size: 200KG

Test Item	Specification	Result	Test Method
Appearance	White or off-white crystals of crystalline powder	Conforms	Visual
Identification	Match with the standard	Conforms	IR
Assay	97%~103%	99.6%	HPLC
Optical activity $[\alpha]^{20^\circ}_D$	+63.0°~67.0°, c=1.0 in H <sub>2</sub> O	+66.2°	Polarimetry
Loss on drying	≤2%	0.02%	Drying (105°C, 4hr)
Residue on ignition	≤0.5%	0.01%	Electric furnace (550°C, Overnight)
Chloride	≤0.5%	Conforms	ICP-MS
Sulfate	≤0.5%	Conforms	ICP-MS
<b>Related compounds (HPLC,%)</b>			
Total impurities	≤2%	0.3%	HPLC
Sucrose	≤1%	Not detected	HPLC
Pinitol	≤1%	Not detected	HPLC
Glucose(dextrose)	≤1%	Not detected	HPLC
Fructose	≤1%	Not detected	HPLC
Myo-inositol	≤1%	Not detected	HPLC
Unkonw impurity	≤0.1%	<0.1%	HPLC
<b>Heavy Metal</b>			
Heavy Metals	≤10 ppm	Conforms	ICP-MS
Lead (Pb)	≤1 ppm	Conforms	ICP-MS
Arsenic (As)	≤1 ppm	Conforms	ICP-MS
Cadmium (Cd)	≤1 ppm	Conforms	ICP-MS
Mercury (Hg)	≤0.1 ppm	Conforms	ICP-MS
<b>Microbiological Tests</b>			
Total Microbial Count	≤100CFU/g	<100CFU/g	SPC method (PCA)
Mold and Yeast	≤100CFU/g	<100CFU/g	SPC method (PDA)
<i>E. Coli.</i>	Negative/10g	Negative	BGLB method
<i>Salmonella</i>	Negative/10g	Negative	RV, TT Broth method
Conclusion	Comply with Required Standards.		
Packing	Packed in paper-drums and two plastic-bags inside. N.W:25kgs/drums.		
Shelf Life	24 months if sealed and store away from direct sun light.		
Storage	Store in a cool and dry place, away from light, heat and oxygen.		

QC Manager: Yanxia Li

Analyst: Fan Sun

