

CERTIFICATE OF ANALYSIS

Product Name:	5-Aminolevulinic Acid Hydrochloride	CAS No:	5451-09-2
Batch No.:	ZYSW20211201	Manufacture Date:	2021-12-03
Quantity:	186.4kg	Expired Date:	2023-12-02
Standard:	Enterprise Standard	Shelf life:	2Years

Analysis Items	Specification	Result
Assay,(%)	5-aminolevulinic acid hydrochloride	99.86%
Any other single impurity	≤ 0.3%	Conform
Total impurities	≤ 1.0%	0.30%
Identification IR	HPLC	Conform
Appearance	Almost white to off-white crystalline	Almost white crystalline powder
Loss on drying,(%)	≤ 1.0%	0.33%
Melting point	150°C--155°C	151.1°C--152.3°C
Residue on ignition	≤ 0.5%	0.10%
Heavy metals	≤ 20ppm	Conform
Iron	≤ 20ppm	Conform
Bacteria endotoxins	≤ 0.4 USP EU/mg	Conform
Microbial Limits		
Total aerobic microbial count	≤ 100 cfu/g	Conform
Staphylococcus aureus	Absence	Absence
Pseudomonas aeruginosa	Absence	Absence
Salmonella species	Absence	Absence
Escherichia Coli	Absence	Absence

Conclusion: Conform to Specification

Packing: Packed in paper-drums and two plastic-bags inside

Storage:Store in a well-closed container away from moisture,direct light and heat.

Inspector:Liuqiang

Reexamining:Zhangguangchao

Verification:Miaoyu