

CERTIFICATE OF ANALYSIS

Product Name:	Alpha-Ketoglutarate		
CAS NO.:	328-50-7	Standard:	In-house Standard
Batch Number:	20211215	Manuf. Date:	Dec.15, 2021
Quantity:	1100kg	Expiration Date:	Dec.14, 2023
Storage Condition:	Preserve in tight containers at controlled room temperature.		

TEST ITEM	SPECIFICATION	RESULTS
Description	White crystalline or crystalline power	Conforms
Identification	Meet the requirements	Conforms
Physical Characteristics		
Transmittance	$\geq 97.0\%$	99.3%
Loss on Drying	$\leq 0.5\%$	0.3%
Residue on Ignition	$\leq 0.1\%$	0.06%
Heavy Metals	$\leq 10.0\text{ppm}$	Conforms
Iron	$\leq 10.0\text{ppm}$	Conforms
Arsenic(As)	$\leq 3.0\text{ppm}$	Conforms
Lead(Pb)	$\leq 1.0\text{ppm}$	Conforms
Cadmium(Cd)	$\leq 1.0\text{ppm}$	Conforms
Mercury(Hg)	$\leq 1.0\text{ppm}$	Conforms
Microbiological Tests		
Total plate Count	$\leq 1000\text{cfu/g}$	Conforms
Yeast & Mold	$\leq 100\text{cfu/g}$	Conforms
Assay(HPLC)	$\geq 98.0\%$	98.8%
Conclusion:	Conform to the In-house Standard	

Tested by: Fangchao Yang

Approved by: Yulian Liu

