

## CERTIFICATE OF ANALYSIS

<b>Product Name</b>	Ferulic acid		
<b>Chemical Formula</b>	C10H10O4		
<b>Molecular Weight</b>	194.19		
<b>Batch Number</b>	20220312	<b>Manufacture Date</b>	20220312
<b>Report Date</b>	20220312	<b>Expiry Date</b>	20240311

Item of Analysis	Specification	Results	Test Methods
Assay(Ferulic acid)	98%	98.8%	HPLC
<b>Organoleptic</b>			
Appearance	Powder	Conforms	Organoleptic
Color	White or off-white powder	Conforms	Organoleptic
Odor	Characteristic	Conforms	CP2010
Taste	Characteristic	Conforms	CP2010
<b>Physical Characteristics</b>			
Particle Size	100% pass 80 mesh	80MESH	CP2010
Melt point	170.0~174.0 degree	Conforms	USP<731>
Loss on drying	1%NMT (%)	0.38%	USP<731>
Total ash	1%NMT (%)	0.03%	USP<561>
<b>Heavy metals</b>			
Total Heavy Metals	10ppm Max	Conform	USP<231>method II
Lead (Pb)	1ppm NMT	0.02ppm	ICP-MS
Arsenic (As)	1ppm NMT	0.2ppm	ICP-MS
Cadmium (Cd)	2ppm NMT	0.3ppm	ICP-MS
Mercury (Hg)	0.2ppm NMT	0.01ppm	ICP-MS
<b>Microbiological Tests</b>			
Total Plate Count	3000cfu/g Max	Conform	USP<61>
Yeast & Mold	300cfu/g Max	Conform	USP<61>
E. Coli.	Negative	Conform	USP<61>
Salmonella	Negative	Conform	USP<61>
Staphylococcus	Negative	Conform	USP<61>

**Storage:** Store in tight, light-resistant containers, avoid exposure to direct sunlight, moisture and excessive heat.

**Shelf Life:** 24 months if store under the conditions above and stay in original packaging.

