

## CERTIFICATE OF ANALYSIS

<b>Product Name</b>	DL-Malic acid		
<b>CAS</b>	6915-15-7		
<b>Batch Number</b>	20240910	<b>Manufacture Date</b>	20240910
<b>Report Date</b>	20240910	<b>Expiry Date</b>	20260909

Item of Analysis	Specification	Results
Appearance	White or nearly white crystalline powder or granules	Nearly white crystalline granules
Taste	Characteristic sour taste	Characteristic sour taste
Identification	Should be positive response	Positive response
	Infrared spectrum contrast	Consistent with the standard spectrum
DL-Malic acid(C <sub>4</sub> H <sub>6</sub> O <sub>5</sub> ),%	99.0-100.5	99.3
Specific rotation $\alpha_m$ [25°C,D]	-0.10 - +0.10	0
As, mg/kg	≤2	<2
Pb, mg/kg	≤2	<2
Residue on ignition, %	≤0.1	0.07
Fumaric acid content, %	≤1.0	0.67
Maleic acid, %	≤0.05	0.02
Water insoluble matter, %	≤0.1	0.006

**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

