

## Certificate of analysis

### L-Methionine

CAS No.	63-68-3	Code	BIOJMLE001
Batch No	22030301	Manufacture Date	Mar.03, 2022
Expiry Date	Mar.02, 2025	Quantity	150kg

Testing Items	Specifications	Results
Appearance	White crystals or crystalline powder	Complies
Identification	Infrared absorption	Complies
Assay	98.5%~101.5%	99.3%
Residue on ignition	$\leq 0.4\%$	0.07%
Chloride(Cl)	$\leq 0.05\%$	<0.05%
Sulfate(SO <sub>4</sub> )	$\leq 0.03\%$	<0.03%
Iron(Fe)	$\leq 30\text{ppm}$	<30ppm
Heavy metals(Pb)	$\leq 15\text{ppm}$	<15ppm
Related compounds	Any individual impurity $\leq 0.5\%$ Total impurities $\leq 2.0\%$	Complies
Specific Rotation $[\alpha]_D^{25}$	+22.4 °~+24.7 °	+23.5 °
pH	5.6~6.1	5.9
Loss on drying	$\leq 0.3\%$	0.11%
Conclusion	This product conforms to USP40 standard	

**\*Storage condition: Store below 25°C, Protect from moisture and light.**