

**MP Biomedicals, LLC**29525 Fountain Parkway  
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## Certificate of Analysis

**Product Description:** Sodium L-Malate  
**Catalog Number:** 218073  
**Lot:** S8196

**Formula:** C<sub>4</sub>H<sub>4</sub>Na<sub>2</sub>O<sub>5</sub>  
**CAS #:** 138-09-0  
**Physical Description:** White Crystalline Powder

**Formula Weight:** 178.07  
**Storage:** 15 - 30°C

Test	Specification	Result
Identity Test	Passes	Passes

Solution (1% in water): Colorless  
Turbidity (1% in water): 0.7 NTU  
Water (KF): 9.3%  
Melting point: 151°C  
Perchloric acid titration: 99.7%  
Purity (HPLC): 97.1 area%  
Specific optical rotation [α]<sub>D</sub>: -8.2° (c=1, in water, 20°C)  
FTIR: Corresponds  
Recommended Retest Date (MM/DD/YYYY): 03/17/2024



03/21/2022 - Lily Meng  
MP Biomedicals, LLC.  
QC Chemist

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