

# COA (Certificate of Analysis)

Product Name: Hydroxypropyl methyl cellulose(HPMC)

Product Brand: Sigma-Aldrich

Product Number: 423203

Batch Number: HPMC20241218

Test Results

	≡ TEST	≡ SPECIFICATION	≡ RESULTS	≡ METHOD
1	Appearance	Beige to light-colored powder	Beige powder	Visual Inspection
2	Solubility	Insoluble in cold water, swells in hot water	Swells in hot water	Internal Method
3	Identification (FTIR)	Conforms to standard spectrum	Conforms	USP <197>
4	Moisture Content (LOD)	NMT 5.0%	2.8%	USP <731>
5	pH (1% solution in water)	5.0 – 8.0	6.1	USP <791>
6	Viscosity (2% solution at 20°C)	As per customer specification (e.g., 100 – 150 mPa·s)	135 mPa·s	USP <912> / In-house Method
7	Heavy Metals	NMT 10 ppm	<10 ppm	USP <231>
8	Residue on Ignition	NMT 0.5%	0.3%	USP <281>
9	Assay (on dry basis)	≥98.0%	98.7%	Gravimetric / In-house Method

10	Loss on Drying	NMT 5.0%	2.8%	USP <731>
11	Microbial Limits	Total count NMT 1000 CFU/g	Within limits	USP <61>, <62>

---

Approved By (QA Supervisor): Max Dockling

QC Status: Approved