

CERTIFICATE OF ANALYSIS

PRODUCT **MICROCRYSTALLINE CELLULOSE 101 NF**
LOT No. L8C720 (210610-B)
MFG DATE: June 10, 2021 (MADE IN INDIA)
LAST RETEST DATE: June 10, 2026
EXP./ RETEST DATE: June 09, 2028

White or almost white, free-flowing powder consisting of non-fibrous particles, insoluble in water, dilute acid and most organic solvents. Practically insoluble/very slightly soluble in dilute NaOH solution (1 in 20)

TEST ITEMS	SPECIFICATIONS	RESULTS
Identification A	Infrared Absorption	Complies
Identification B (Zinc Chloride)	Should produce a violet-blue color	Positive
Identification C (Degree of Polymerization)	NMT 350	231.2
pH (5g in 40mL water)	5.0 – 7.5	6.10
Conductivity	NMT 75 $\mu\text{S}\cdot\text{cm}^{-1}$	39 $\mu\text{S}\cdot\text{cm}^{-1}$
Water Soluble Substances	NMT 0.25%	0.15%
Ether Soluble Substances	NMT 0.05%	0.02%
Loss on Drying	NMT 7.0%	4.5%
Heavy Metals	NMT 10 ppm	Complies
Arsenic	NMT 3 ppm	Complies
Lead	NMT 0.5 ppm	Complies
Cadmium	NMT 2 ppm	Complies
Mercury	NMT 0.1 ppm	Complies
Residue on Ignition	NMT 0.1%	0.05%
Bulk Density	0.28 – 0.34 g/mL	0.30 g/mL
Sieve Analysis (% Retention)		
60 Mesh	$\leq 1.0\%$	NIL
200 Mesh	$\leq 30.0\%$	16.0%
Particle Size Distribution		
D ₁₀	15 - 30 μm	24.9 μm
D ₅₀	45 – 80 μm	49.5 μm
D ₉₀	100 – 170 μm	126.2 μm
Total Plate Count	NMT 1,000 cfu/g	70 cfu/g
Yeast & Mold	NMT 100 cfu/g	10 cfu/g
Escherichia coli	Absent/g	Absent
Staphylococcus aureus	Absent /g	Absent
Salmonella species	Absent/10g	Absent
Pseudomonas aeruginosa	Absent/g	Absent

The raw materials, manufacturing process, and product do not contain any of the solvents listed in Residual Solvents (Ph.Eur. 5.4; USP<467>). This batch complies with the requirements of USP. Tested according to USP.

Disclaimer: This Certificate of Analysis is provided for informational purposes only and is based on testing of a representative sample. Results may not reflect the characteristics of the entire batch. Some data may be derived from third-party or supplier-provided reports. The user is solely responsible for verifying the suitability, quality, and fitness of the product for their intended use. No warranties, express or implied, are made regarding accuracy, completeness, or performance, and the supplier assumes no liability for errors, omissions, or variations.