

**CERTIFICATE OF ANALYSIS  
MCC 101 Microcrystalline Cellulose  
NF, Ph.Eur.**

<b>Test Items</b>	<b>Units</b>	<b>Limits</b>	<b>Results</b>
Particle size distribution D10	μ	Not more than 30	22
Particle size distribution D50	μ	40 - 60	44
Particle size distribution D90	μ	Not less than 80	96
Identification A		Violet-blue color	Conforms
Degree of polymerization		210 - 270	219
Conductivity	μs/cm	Not more than 75.0	25.5
pH		5.5 - 7.0	6.2
Loss on drying	%	Not more than 7.0	3.7
Bulk density	g/ml	0.26 - 0.34	0.30
Residue on ignition (sulfate ash)	%	Not more than 0.05	0.02
Water-soluble substances	%	Not more than 0.25	0.13
Heavy metals	ppm	Not more than 10	Conforms
Ether-soluble substances	%	Not more than 0.050	0.008
Total aerobic microbial count	cfu/g	Not more than 100	Conforms
Total molds and yeasts count	cfu/g	Not more than 10	Conforms
Escherichia coli	/1g	Absence	Conforms
Staphylococcus aureus	/1g	Absence	Conforms
Salmonella species	/10g	Absence	Conforms
Pseudomonas aeruginosa	/1g	Absence	Conforms

**Additional Statement:** The product meets the requirement for Residual Solvents USP<467>

\* Data based on manufacturer's document

*John*

Quality Control

