

Product Specification

Product group: MCC

Brand name: Pharmacel® 102

Article code: SAP 743679; Navision 13102-5355

SAP 733317; Navision 13122-5355

Product descriptions: Microcrystalline Cellulose

Document No. PD-0473 Page 1 of 2

Manufacturer : DFE Pharma India Private Limited, India

Production site : DFE Pharma India Private Limited, Cuddalore, India and Contract manufacturing

location at Chemfield Cellulose Private Limited., Nagpur, India

Product name : Pharmacel® 102

Conforms to USP-NF, Ph. Eur., JP and IP Specifications on date of manufacture

Product description : A white or almost white, fine, crystalline or granular, slightly hygroscopic powder

having fluidity and odorless

Solubility : Practically insoluble in water, acetone, anhydrous ethanol, toluene, diethyl ether,

dilute acids and in a 50 g/L solution of Sodium hydroxide

Physical - Chemical Data

Specification

Identification A (USP, Ph.Eur.,), 2 (JP)	Pass
Identification B (USP, Ph.Eur.,), 1 (JP)	Pass
Identification C (USP, Ph.Eur.,), 3 (JP)	Max. 350
Identification C (IP)	Pass
Solubility in ammoniacal copper tetrammine	Pass
рН	5.5 - 7.0
Conductivity	Max. 75 μS/cm
Ether soluble substances	Max. 0.05 %
Water soluble substances	Max. 0.20 %
Heavy metals	Max. 10 ppm
Assay (IP)	97.0 - 102.0 %
Arsenic	Max. 2 ppm
Starch and Dextrins (IP)	Pass
Organic impurities (IP)	Pass
Loss on Drying	3.0 - 5.0 %
Residue on ignition	Max. 0.05 %
Bulk density	0.28 - 0.33 g/mL



Product Specification

Product group: MCC

Brand name: Pharmacel® 102

Article code: SAP 743679; Navision 13102-5355

SAP 733317; Navision 13122-5355

Product descriptions: Microcrystalline Cellulose

Document No. PD-0473 Page 2 of 2

Microbiological Data Specification Total Aerobic Microbial Count Max. 100 CFU/g Total Yeast and Mould Count Max. 20 CFU/g Escherichia coli in 10q Negative Pseudomonas aeruginosa in 10g Negative Staphylococcus aureus in 10g Negative Salmonella species in 10q Negative Shigella species in 10q Negative

Particle Size Distribution (Airjet, Malvern)SpecificationParticle size %< 75μm</td>30.0 - 55.0 %Particle size %< 250μm</td>Min. 92.0 %Particle size D10 $15 - 50 \mu m$ Particle size D50 $80 - 130 \mu m$ Particle size D90 $170 - 283 \mu m$

Packaging: A white multi-layered polyethylene bag with a polyethylene inner liner, 25Kg net.

Storage: Keep in original, un-opened packing in ambient conditions, protected from humidity and away

from strongly odorous materials.

Shelf life: For storage periods exceeding 48 months, we recommend re-testing.

This document substitutes all previous versions issued for the brand names mentioned above. We trust this information, which is made up to the best of our knowledge, will be helpful to you.

Name : Dr. Bastiaan Dickhoff

Job title : Director Innovation & Technical Solutions

B. Diskliff

Signature

This document is controlled by a validated, electronic system and is valid without signature. The above facsimile signature is only for display.