

Oral Solid Dose

# Pharmacel<sup>®</sup> sMCC 90

Synergistic solution for formulation success



At DFE Pharma we are committed to deliver best-in-class excipients, guided by our principles of quality first and security in supply. Because we work with our customers' needs in mind, we continuously strive to develop, produce, and supply the highest quality excipients.

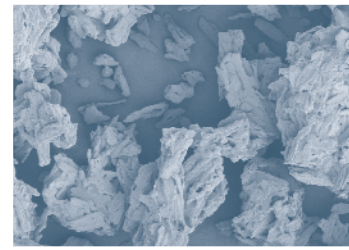
As an addition to our broad excipient portfolio, we have introduced **Pharmacel<sup>®</sup> sMCC 90**, a silicified microcrystalline cellulose, developed as the synergistic solution for challenging oral solid dosage formulations. Co-processing microcrystalline cellulose with silicon dioxide increases its surface area, resulting in enhanced powder flow, superior tabletability, and improved formulation robustness.

Pharmacel<sup>®</sup> sMCC 90 is the perfect choice of excipient that improves tablet compression, aids higher production speed, and enables rapid formulation development.

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# Pharmacel<sup>®</sup> sMCC 90



## Benefits

This new addition to our well-established excipients' portfolio offers customers worldwide the highest quality excipients and services. Pharmacel<sup>®</sup> sMCC 90 has the following benefits compared to conventional excipients:

### Improved tablet compression

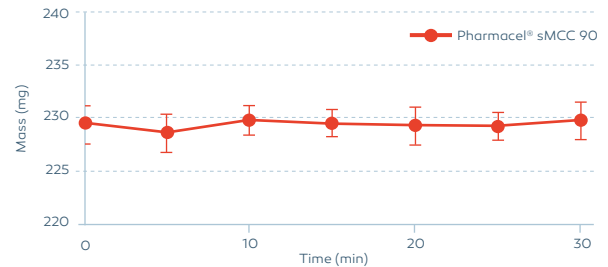
Pharmacel<sup>®</sup> sMCC 90 is a highly functional excipient for direct compression processes. In comparison with conventional microcrystalline cellulose, Pharmacel<sup>®</sup> sMCC 90 leads to lower capping of tablets at high compaction speed thereby enabling 20% harder tablets.

As co-processing silicon dioxide with microcrystalline cellulose results in enhanced surface properties of the material, Pharmacel<sup>®</sup> sMCC 90 offers an optimal combination of good flow and low wall friction. This combination allows compaction at higher doses with lower failure rates, improving your formulation process.

Pharmacel<sup>®</sup> sMCC 90 ensures a smooth tableting process by reducing the risk of capping at high-speed compaction and because of its low tendency for punch sticking.

### Higher production speeds

The production speed of tablets depends on the pace of several intermittent steps. Pharmacel<sup>®</sup> sMCC 90 enables higher processing speed in multiple units of operation. Pharmacel<sup>®</sup> sMCC 90 allows for a swift and more consistent flow from the hopper.



Furthermore, the increased surface area can support the dispersion of the active pharmaceutical ingredient (API), thereby allowing shorter blending times.

Pharmacel<sup>®</sup> sMCC 90 is the preferred excipient for high speed tableting processes, due to improved compaction and reduced capping tendency at low dwell times.

The flowability of Pharmacel<sup>®</sup> sMCC 90 enables consistency in tablet weight, with weight variation below 1% for 250mg placebo tablets<sup>1</sup>.

### Rapid formulation development

Pharmacel<sup>®</sup> sMCC 90 mitigates formulation challenges due to its improved flow and compaction compared to conventional excipients. Additionally, low lubricant and dwell-time sensitivity allow for easy-scale up. Moreover, Pharmacel<sup>®</sup> sMCC 90 reduces the number of excipients compared to regular grades and removes the need to process silica.

## Facts

### Typical product data

Complies with USP-NF, JPE  
Kosher & Halal certified

### Particle size distribution

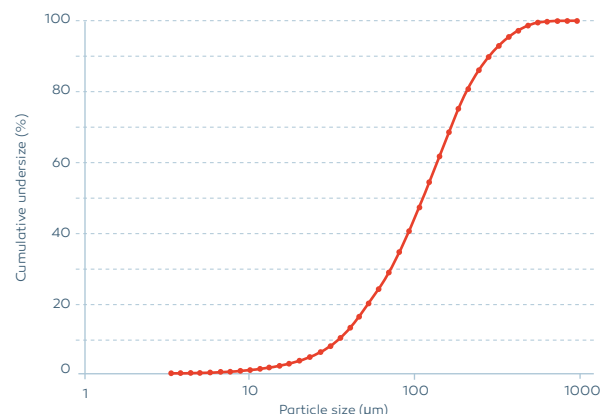
Method: by dry laser diffraction

#### Laser diffraction

x10	35 µm	Bulked density	0.31 g/ml
x50	110 µm	Tapped density	0.47 g/ml
x90	270 µm	SSA	5.1 m <sup>2</sup> /g

### High protective packaging

	Bag
Capacity	25 kg
Composition	Multi-layer PE
Shelf life	24 months retest



For more information on Pharmacel<sup>®</sup> sMCC 90 please contact your local sales representative or go to [dfepharma.com/excipients/sMCC](https://dfepharma.com/excipients/sMCC)