MicroceLac[®] Plus – sets a new benchmark in tabletability by outperforming conventional DC excipients



MicroceLac® Plus is an innovative addition to MEGGLE's co-processed excipients product line, combining 35% alpha-lactose monohydrate and 65% microcrystalline cellulose to enhance tablet formulation.

Its unique advantage is the exceptional tabletability, delivering tablet hardness that exceeds not only its individual DC components and their physical mixture but also standard excipients.

Designed for direct compression, it is ideal for production of robust tablets with high mechanical strength and low friability, even with challenging APIs or high drug loads. **MicroceLac® Plus** is the next level excipient for those who want to be sure of superior performance.



Benefits

- Outstanding tabletability: Outperforming all standard DC excipients on the market
- Exceptional compressibility: Enables direct compression, even for difficult active ingredients or high drug load
- High tablet hardness and very low friability also at high drug loads
- Synergistic effect: Tabletability of CPE even better than for single ingredients
- Good flowability in comparison with its corresponding physical blend
- No capping tendency due to ideal combination of plastic and brittle deformation
- Very smooth surface of the resulting cores for easy and economical coating
- Constant lactose/cellulose ratio: Simple and consistent dosing also in continuous manufacturing
- Reduction of tablet size: Ideal for manufacturing of easy-to-swallow, patient-friendly dosage forms

Areas of Application

- Primarily designed for direct compression (DC) and continuous direct compression (CDC).
- Direct compression of difficult APIs
- Formulations with a high API content
- Suitable for mini-tablets
- Easy and economical coating

MicroceLac[®] Plus – sets a new benchmark in tabletability by outperforming conventional DC excipients





Comparing the tabletability profile of MicroceLac* Plus to MicroceLac* 100, which already offers exceptional performance, underlines the premium quality of MicroceLac* Plus in terms of achievable tensile strength by applied compaction pressure.

Residual porosity



Thanks to its unique intra-particular structure, MicroceLac* Plus delivers still significant exploitable residual porosity (solid fraction ≤ 0.85) up to even high tensile strength of ≈ 5 MPa.



Sieve data – co-processed lactose

	Lactose type	MicroceLac® Plus
		specified/typical
Particle size distribution	< 32 µm	NMT 30%/19%
Method: Air-jet sieving	< 63 µm	35-70%/ 58%
	< 100 µm	NLT 80%/94%



MicroceLac* Plus features a unique intraparticular microporous structure that supports the exceptional tableting capabilities of the material.

MEGGLE GmbH & Co. KG Business Unit Excipients Megglestrasse 6-12 83512 Wasserburg Germany Phone +49 8071 730 info.excipients@meggle.com www.meggle-excipients.com