



2025

MicroceLac® Plus

Co-processed Excipient for Direct Compression

BUSINESS UNIT EXCIPIENTS



PRODUCT DESCRIPTION

Co-processed Excipient
for Direct Compression



Business Unit Excipients

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MicroceLac® Plus

new co-processed Excipient for Direct Compression (DC)

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 tableability, delivering tablet hardness that exceeds not only its individual 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 & APPLICATIONS

Co-processed Excipient
for Direct Compression



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Benefits

- Outstanding tableability: Outperforming all standard excipients on the market
- 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: Tableability 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



PARTICLE SIZE DISTRIBUTION & TYPICAL VALUES

Co-processed Excipient for Direct Compression



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Particle size distribution (PSD)

	MicroceLac® Plus	
	specified	typical
32 µm	NMT 30 %	19 %
63 µm	35 - 70 %	58 %
100 µm	NLT 80 %	94 %

Analyzed by Hosokawa Alpine air-jet sieve.



Additional typical values

	Density bulk (g/l)	Density tapped (g/l)	Hausner ratio	Carr's index (%)	Angle of Repose
MicroceLac® Plus	430	530	1.24	19	35



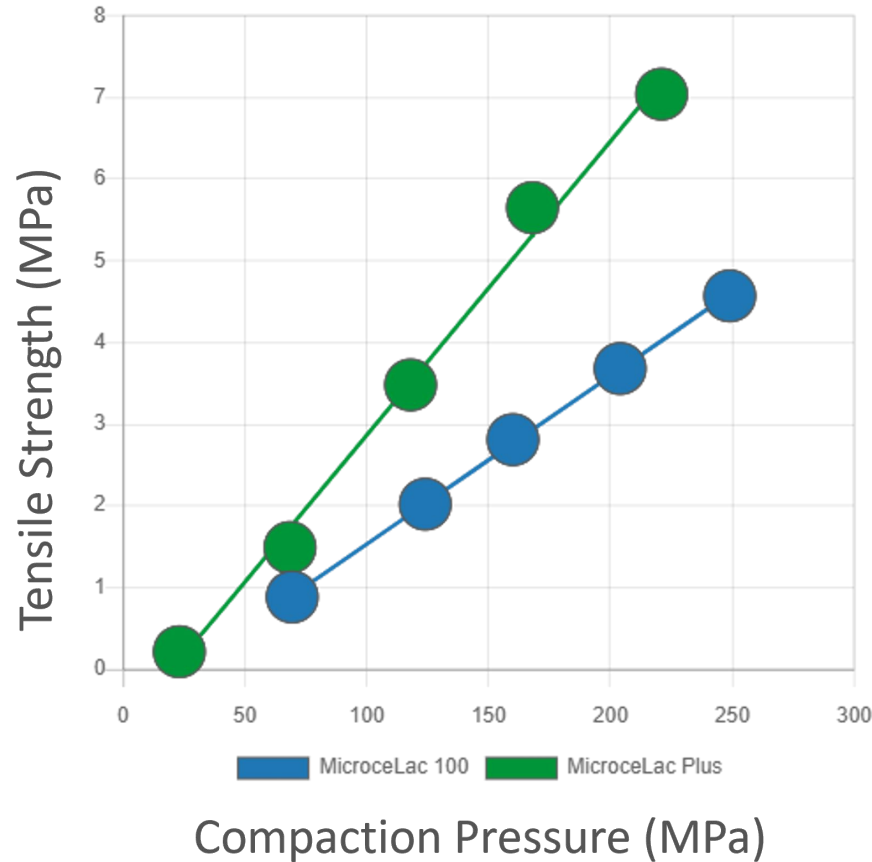
TABLETABILITY PROFILE

Co-processed Excipient for Direct Compression

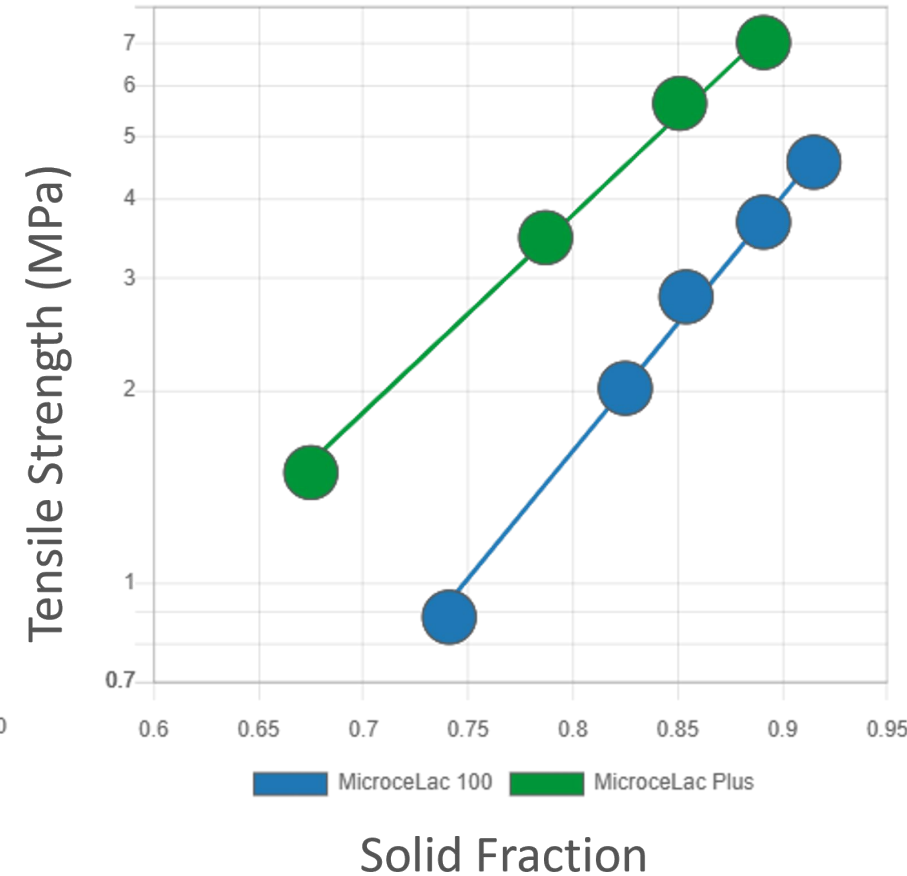


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Comparing the tableability profile of MicroceLac Plus to MicroceLac 100, which already offers exceptional performance, underlines the premium quality of MicroceLac Plus in terms of achievable tensile strength by applied compaction pressure.



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



MICROPOROUS STRUCTURE

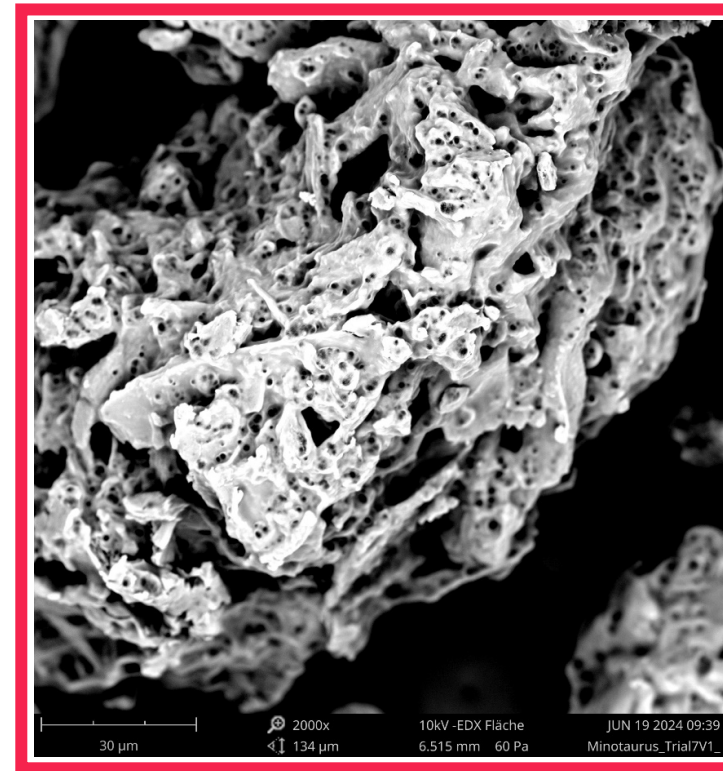
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MicroceLac® Plus

features a unique intraparticulate microporous structure that supports the exceptional tableting capabilities of the material.



PACKAGING & RETEST DATE

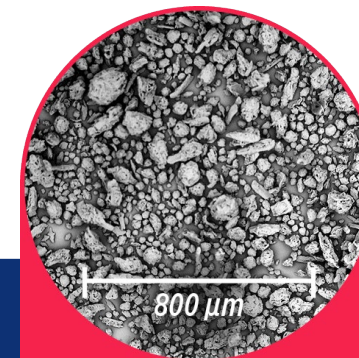
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MicroceLac® Plus



Retest date	18 months
Packaging	Paper bag with PE-EVOH-PE inliner
Size	20 kg

*For more Information & Samples
Get in touch with us!*

www.meggle-excipients.com





THANK YOU!

Vielen Dank! Teşekkür ederim! Ďakujem! Hvala vam! Grazie! Хвала вам! ありがとう
ございました Dekuju! شكرًا جزيلًا! Благодаря ти Mulțumesc! Obrigado! 谢谢

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