

Parateck® SI Excipient

Soft to the tongue

Combining good compressibility
with a great mouth feel for
your oral dosage formulation.

Parateck® SI is a superior excipient consisting of directly compressible sorbitol, supporting excellent flowability and a great mouth feel.

The life science business
of Merck KGaA,
Darmstadt, Germany
operates as MilliporeSigma
in the U.S. and Canada.

SAFC®

Pharma & Biopharma Raw
Material Solutions

Parteck® SI Excipient

Pleasantness in all its facets.

When formulating oral dosage forms, matching patients' needs is key. While taste and mouth feel may be judged as subjective, they are crucial to patient compliance when it comes to lozenges, chewables, and similar dosage forms. Parteck® SI is a directly compressible sorbitol, which combines excellent tableting behavior with a pleasant mouth feel and taste. It comes in a variety of particle sizes and qualities to meet the needs of the most diverse applications. The particle structure consists of very loosely packed, interwoven filamentary crystals that point in all directions. Unique to Parteck® SI, these needle-like crystals form the cornerstone of its distinctive physical properties (Fig. 1), allowing you to combine many ingredients into a robust tablet formulation.

PARTECK® SI PROVIDES:



Excellent compressibility



High dilution and adsorption capacity



Pleasant mouth feel



Good flowability

Pleasant mouth feel.

Patients judge a formulation on the grounds of its palatability: its physical appearance in the mouth and the dissolution properties are just as important as its taste. A formula's cooling effect adds a more pleasant appeal while insoluble particles will lead to rejection. Parteck® SI has shown superior properties in this regard, as it prevents clumping and dissolves smoothly, creating a cooling effect on the patients' palates (Fig. 2).

Excellent compression and high dilution potential.

To succeed on the market, most oral dosage forms need to have a highly compressible diluent. Compared to other commercial, crystallized sorbitols, our spray-dried Parteck® SI demonstrates superior compression properties, which minimize the wear and tear on your machines while delivering the tablet hardness you want. Also, Parteck® SI works with active ingredients that have little or no compressibility of their own (Fig. 3).

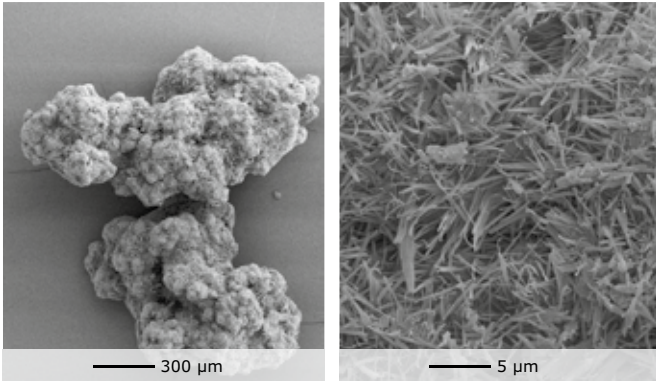


Fig. 1: SEM of Parateck® SI: 50 x (left) and 2500 x (right).

High adsorption capacity.

Our Parateck® SI has an outstanding ability to form ordered mixtures with other solid substances – the preferred choice for micronized active ingredients. Its unique structure traps the active ingredient in the filaments and forms stable clusters. As a result, you'll see more homogenous powder blends, improved content uniformity and less dust during manufacture.

Good flowability and stable formulas.

Thanks to its good flow behavior and exceptional compressibility, our Parateck® SI helps your production to run even more smoothly and efficiently. That's why it is an ideal fit for sugar-free chewables, effervescent tablets, and lozenges. Tablets manufactured with Parateck® SI also show a reduced water uptake compared to tablets produced with standard sorbitol. The amount of reducing sugars in the excipient itself is far lower than what is allowed according to pharmacopoeias, resulting in even more stable formulas.

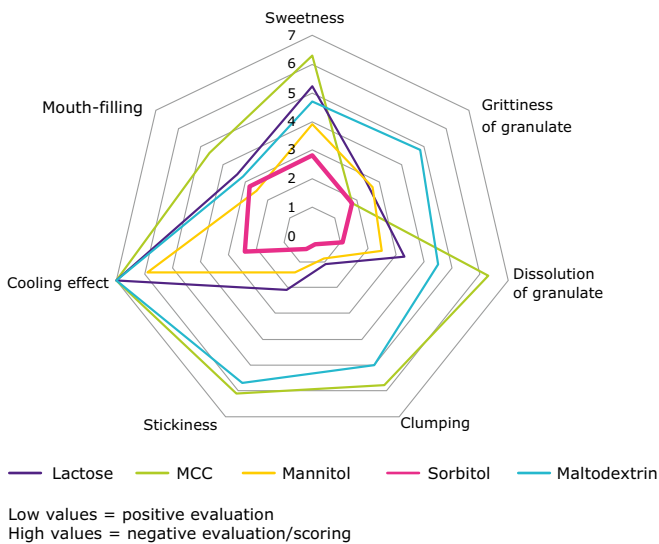


Fig. 2: Multivariate data analysis of palatability parameters, comparison of 5 typical tablet binders.

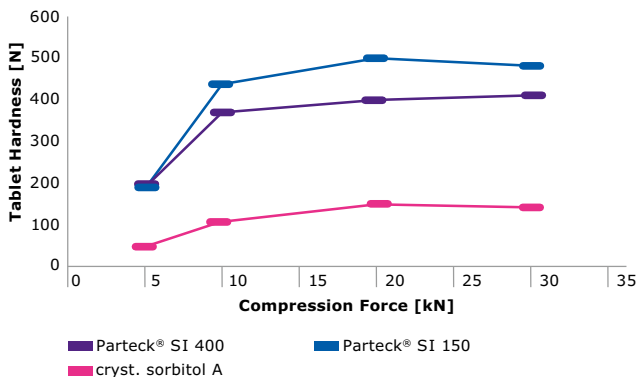


Fig. 3: Parateck® SI: Compression profile.

Placebo formula with 1 % magnesium stearate. Parateck® SI is spray-dried sorbitol, while cryst. sorbitol A is commercially available crystallized sorbitol.

The Emprove® Program

Ensuring the compliance of your pharma and bio-pharma products involves the compilation of a vast amount of data, which can be time- and resource-intensive. In order to facilitate and accelerate this process, we developed our Emprove® Program. It includes 400 pharma raw and starting materials and a selection of filtration and single-use products. Each product in the portfolio is complemented with three different types of dossiers supporting you throughout the different stages of your operations: qualification, risk assessment, and process optimization – all designed to help you speed your way through the regulatory maze.

Our knowledgeable team of technical and quality experts will share best practices and help guide you to a compliant solution that meets your performance goals.

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PARTECK® PRODUCT PORTFOLIO

Excipients for oral solid dosage forms featuring unique particle properties and outstanding individual functionalities such as solubility enhancement or controlled release.

For more information, visit:

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Need lubrication?

Pardeck® LUB is a range of stearates for consistent lubrication performance.

Ordering information

Cat. No.	Product	Pack size
1.03583.9028	Pardeck® SI 150 (Sorbitol) EMPROVE® ESSENTIAL Ph Eur, BP, JP, NF, JSFA, E420	25 kg
1.15079.9028	Pardeck® SI 200 (Sorbitol) EMPROVE® ESSENTIAL Ph Eur, BP, NF, E420	25 kg
1.03140.9028	Pardeck® SI 400 (Sorbitol) EMPROVE® ESSENTIAL Ph Eur, BP, JSFA, NF, E420	25 kg
1.11597.9028	Pardeck® SI 400 LEX EMPROVE® ESSENTIAL Ph Eur, BP, NF, JP	25 kg
1.03557.9028	Pardeck® SI 450 (Sorbitol) EMPROVE® ESSENTIAL NF, FCC, JSFA	25 kg

The typical technical data above serve to generally characterize the excipient. These values are not meant as specifications and they do not have binding character. The product specification is available separately, from the website: EMDMillipore.com

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