

**SAFC**

Pharma/Biopharma Raw Materials



PARTECK® SI EXCIPIENT

# SOFT TO THE TONGUE

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

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

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

**MERCK**

# 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 excipient 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 excipient, 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 EXCIPIENT 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 excipient 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 excipient demonstrates superior compression properties, which minimize the wear and tear on your machines while delivering the tablet hardness you want. Also, Parteck® SI excipient works with active ingredients that have little or no compressibility of their own (Fig. 3).

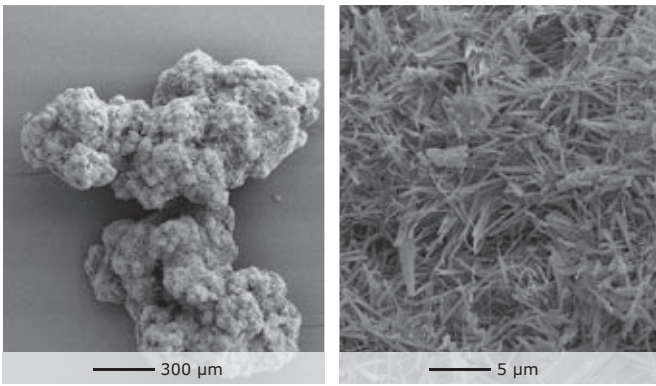


Fig. 1: SEM of Parateck® SI excipient: 50 x (left) and 2500 x (right).

## High adsorption capacity.

Our Parateck® SI excipient 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 excipient 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 excipient 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.

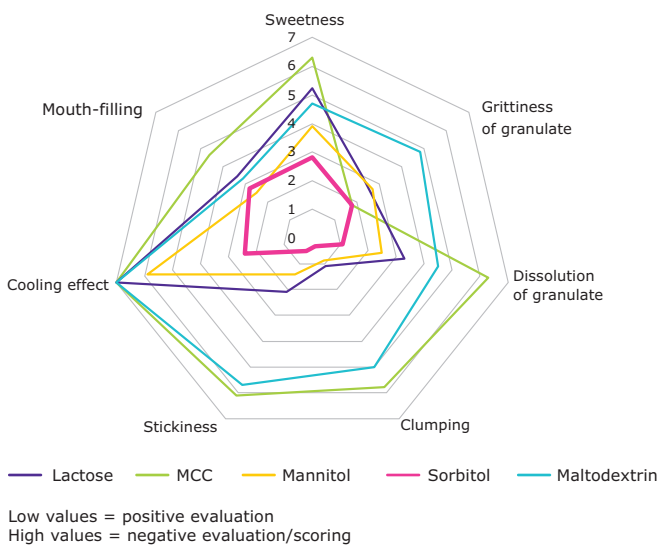


Fig. 2: Multivariate data analysis of palatability parameters, comparison of 5 typical tablet binders.

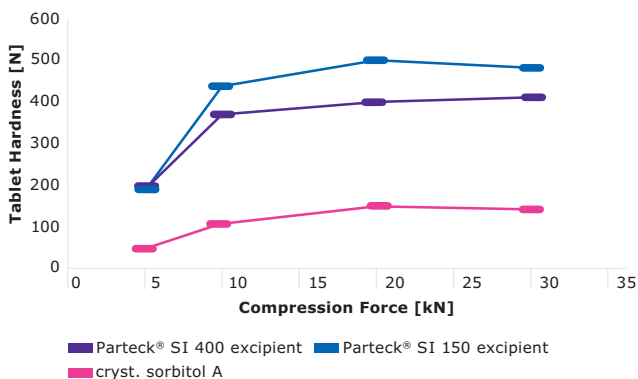


Fig. 3: Parateck® SI excipient: Compression profile.

Placebo formula with 1 % magnesium stearate. Parateck® SI excipient 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.

Find out more at:  
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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:

[MerckMillipore.com/parteck](http://MerckMillipore.com/parteck)

## FORMULATION PRODUCT FINDER APP

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[MerckMillipore.com/formulationapp](http://MerckMillipore.com/formulationapp)

## Need lubrication?

Parteck® LUB is a range of steirates for consistent lubrication performance.

# Ordering information

Cat. No.	Product	Pack size
1.03583.9028	Parteck® SI 150 (Sorbitol) EMPROVE® ESSENTIAL Ph Eur, BP, JP, NF, JSFA, E420	25 kg
1.15079.9028	Parteck® SI 200 (Sorbitol) EMPROVE® ESSENTIAL Ph Eur, BP, NF, E420	25 kg
1.03140.9028	Parteck® SI 400 (Sorbitol) EMPROVE® ESSENTIAL Ph Eur, BP, JSFA, NF, E420	25 kg
1.11597.9028	Parteck® SI 400 LEX EMPROVE® ESSENTIAL Ph Eur, BP, NF, JP	25 kg
1.03557.9028	Parteck® 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: [MerckMillipore.com](http://MerckMillipore.com)

We provide information and advice to our customers on application technologies and regulatory matters to the best of our knowledge and ability, but without obligation or liability. Existing laws and regulations are to be observed in all cases by our customers. This also applies in respect to any rights of third parties. Our information and advice do not relieve our customers of their own responsibility for checking the suitability of our products for the envisaged purpose.

For additional information, please visit [MerckMillipore.com](http://MerckMillipore.com)

To place an order or receive technical assistance, please visit [MerckMillipore.com/contactPS](http://MerckMillipore.com/contactPS)

