SAFC®
Pharma/Biopharma Raw Materials

PARTECK® SLC EXCIPIENT

CARRY YOUR API TO TOP PERFORMANCE

Enhance API solubility.
Achieve stable, high drug loads.

Parteck® SLC excipient is an innovative silica drug carrier that enhances drug solubility thanks to its unique surface structure. This allows for significantly increased dissolution of your API.

MilliporeSigma

Parteck® SLC Excipient

Enhancing drug solubility.

The solubility of your API is critical. To help you improve your formulation, we've created an innovative material with a unique surface structure that provides significantly increased dissolution of your API, but without increasing regulatory requirements. Featuring a unique pore structure, Parteck® SLC excipient enables you to load oral solid dosage forms with your amorphously distributed API to the highest levels, dramatically increasing API solubility.

By using Parteck® SLC excipient as a new formulation tool, you are able to reformulate many drug molecules. As more and more drug patents expire, the reformulation of drugs can greatly enhance your life cycle management. Parteck® SLC excipient is our solution to achieve maximum load for maximum release, leading to increased bioavailability of your API.

Superior dissolution performance.

Parteck® SLC excipient's disordered mesopores (~ 6 nm) create a large and easily accessible surface area of approx. 500 m²/g, enabling high API load. The API is deposited within the particle structures in its amorphous form, leading to increased dissolution rate and solubility through supersaturation. Multiple studies have proven superior performance both *in vitro* and *in vivo* (Fig. 2 and 3).

PARTECK® SLC EXCIPIENT PROVIDES:

Superior dissolution performance.

Leads to increased dissolution rate and solubility through supersaturation.

User-friendly particle size.

Allows easy handling in manufacturing.

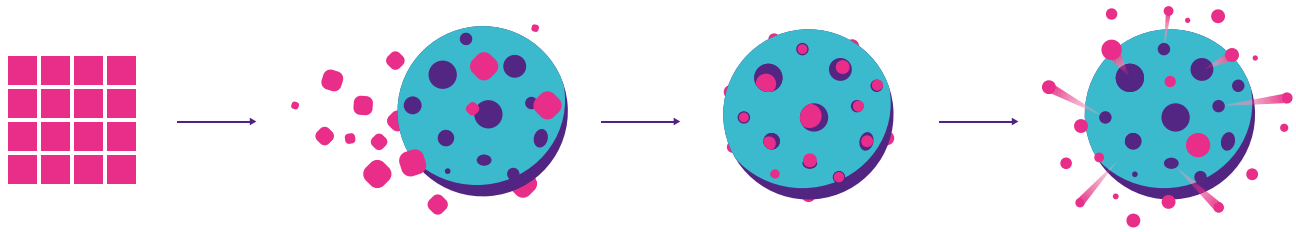
High-end application support.

We offer in-depth technical counseling, supported by dedicated Application Centers.

Multi-compendial compliance.

Parteck® SLC excipient is generally recognized as safe (GRAS) and complies with Ph. Eur. and USP.

Drug carrier: mode of action



Crystalline API

API dissolved in organic solvent

Amorphous API loaded on Parteck® SLC excipient

Improved API dissolution

User-friendly particle size.

With its user-friendly particle size (5–20 µm) and bulk density (0.32 g/mL), Parteck® SLC excipient allows for easy loading, tableting, or creation of capsules. API-loaded Parteck® SLC can easily be further formulated with established excipients, producing stable and fast-acting tablets. Since it achieves a considerably high API load, final tablets result in a convenient size and weight. The dissolution performance is not impacted by the compression to the final tablet.

High-end application support.

Our expert support team helps you explore what Parteck® SLC excipient offers – from early development up to production scale. We also offer feasibility studies concerning loading and *in-vitro* dissolution as well as a product starter kit which includes a step-by-step loading guidance.

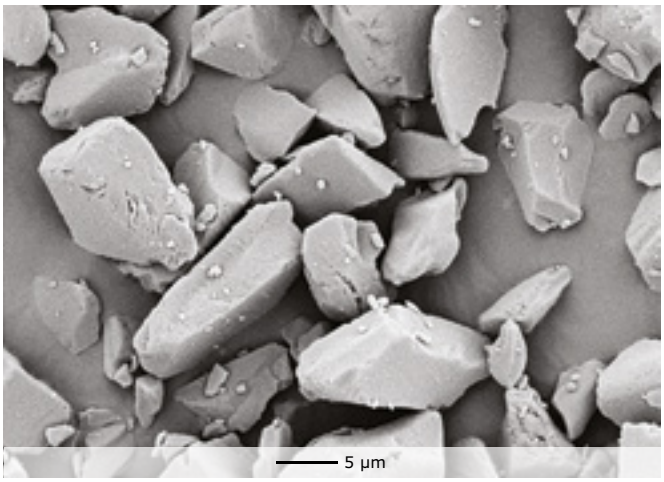


Fig. 1: REM picture of Parteck® SLC excipient particles.

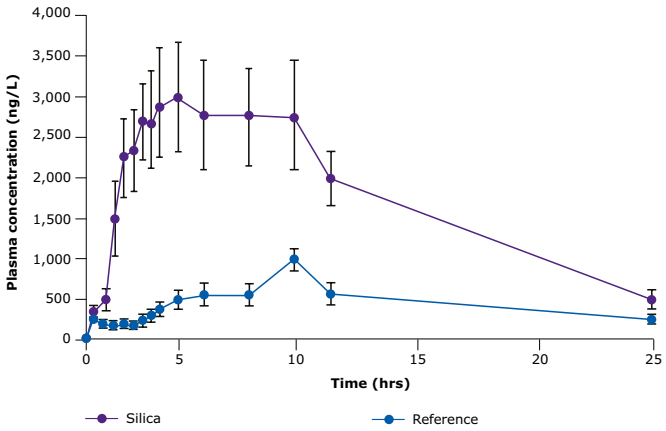


Fig. 2: *In-vivo* bioavailability.

PK study in fasted pigs indicates a significant bioavailability enhancement of fenofibrate through Parteck® SLC excipient *in vivo*.

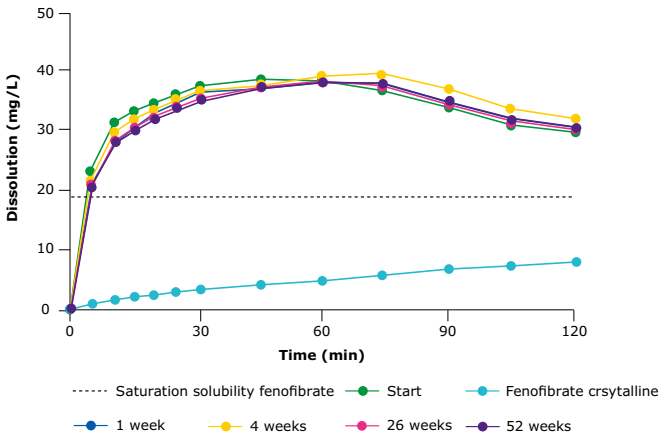


Fig. 3: Dissolution performance of tablets after storage (25 °C/60 % r.H.).

Fenofibrate loaded on Parteck® SLC excipient shows stable dissolution performance over 52 weeks. 38 mg API – 750 mL SGFsp + 0.1 % SDS – 75 rpm, n=3.

Click. Explore. Learn more.

PARTECK® PRODUCT PORTFOLIO

Excipients for oral solid dosage forms featuring unique particle properties and outstanding individual functionalities such as suitability for direct compression or controlled release.
For more information, visit:

EMDMillipore.com/parteck

FORMULATION PRODUCT FINDER APP

Find the right product for specific applications at:

EMDMillipore.com/formulationapp

Need lubrication?

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

Ordering information

Cat. No.	Product	Pack size
1.20091.0001	Parteck® SLC 500 USP, Ph Eur	300 g Starter kit
1.20091.1000	Parteck® SLC 500 USP, Ph Eur	1 kg
1.20091.9025	Parteck® SLC 500 USP, Ph Eur	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 at: **EMDMillipore.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.

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