

Pardeck® COAT

# When coating runs smoothly.

Reduce coating time with optimized particle properties.

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

**SAFC®**

Pharma & Biopharma Raw Material Solutions

# Parteck® COAT Excipient

## Start rapidly, coat flexibly.

It can be a challenge to find the right coating for your formulation, and it can be even more frustrating when your workflow is restrained due to slow processing times. With Parteck® COAT, you get the right coating adapted to your needs and the ability to prepare coating liquids more rapidly.

Parteck® COAT is a particle engineered polyvinyl alcohol (PVA) with a unique structure specifically designed for immediate release film coating applications. Due to the optimized particle size, it helps to reduce dissolving times in coating solution preparation, thus increasing process efficiency. It can be combined with a variety of supporting excipients, such as plasticizers, anti-tacking agents and pigments – all available in our portfolio – to give you full flexibility in designing the right coating at the right time.

PVA has a long safety record related to its usage in pharmaceutical applications and is generally recognized as safe (GRAS) by the U.S. Food and Drug Administration.

Parteck® COAT is part of our Parteck® particle-engineered excipients range. Our comprehensive excipients portfolio provides standard and customized material solutions tailored to meet your unique needs. Call on our global network of scientists, engineers, regulatory experts and state-of-the-art manufacturing and customer collaboration centers for support.

## PARTECK® COAT PROVIDES:



**Flexibility in coatings** – enables you to adapt coating to your needs



**Rapid preparation time** – water-soluble and rapidly dissolving PVA particles assure a fast preparation of coating liquids even at room temperatures



**High concentration of spraying liquid** – shorten process times and increase coating efficiency



**Stable moisture barrier** – protect your moisture sensitive APIs



**Excellent surface finishing** – increase the value of your formulation



**Multi-compendial material** – GRAS polymer, compliant with Ph Eur, ChP, JPE and USP

## Rapid preparation time.

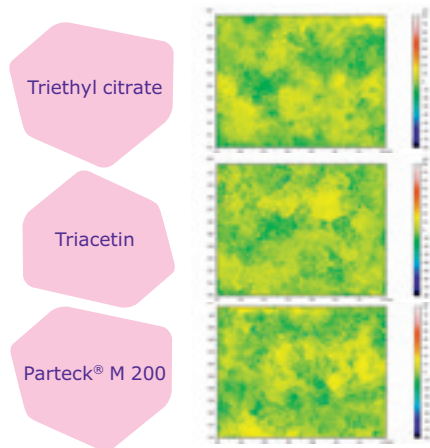
The optimized particle properties of Parteck® COAT have a dual advantage: they support reduced dissolution times in the relevant media as well as lower temperatures required for dissolving the

polymer. This is in contrast to the material in flake form would not dissolve below 60 °C, particle-engineered Parteck® COAT already dissolves at room temperature.

		Parteck®COAT	Standard PVA grade (flakes)	HPMC-based polymer 1	HPMC-based polymer 2
Time to dissolve [min]	20 °C	60	not dissolved*	not dissolved*	not dissolved*
	40 °C	35	not dissolved*	not dissolved*	not dissolved*
	60 °C	20	30	not dissolved*	not dissolved*

**Table 1: Overview of dissolution times for different polymer samples commonly used for coating applications; exemplary data for 5% solutions**

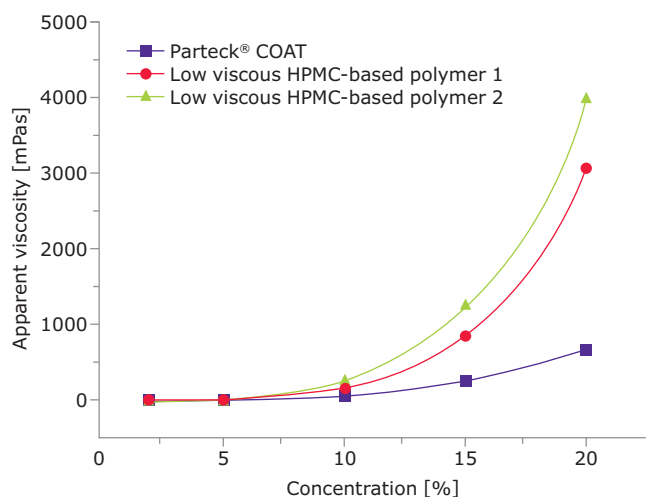
\*after 4 h



## Flexibility in coatings.

Parateck® COAT can be combined with a variety of supporting excipients to optimize the appearance of the final formulation. An excellent surface finishing can be achieved using Parateck® COAT in combination with different plasticizers (see Fig. 1).

**Figure 1: Topographical images of coated tablet surfaces using Parateck® COAT with the addition of 30% plasticizer, confirming a smooth surface of the final formulation**



## High concentration of spraying liquid.

Even at high concentrations, Parateck® COAT solutions are of low viscosity (Fig. 2). This considerably extends the processing window and provides great flexibility to formulators. The spraying liquid can contain up to 20% of solid content, allowing a more efficient coating process.

**Figure 2: Direct comparison of concentration viscosity relationships of Parateck® COAT and HPMC-based polymers**

## Stable moisture barrier.

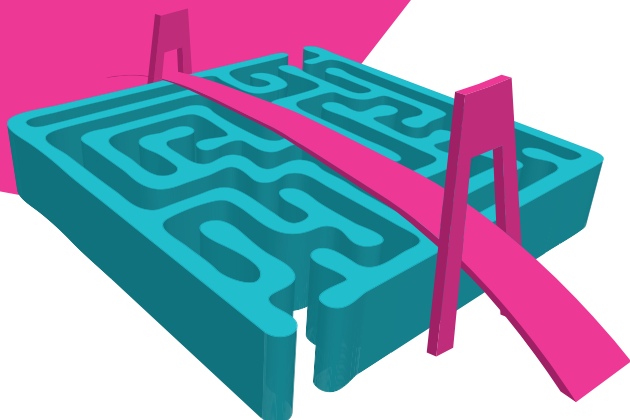
Coatings using Parateck® COAT provide a stable moisture barrier even under accelerated storage conditions. This is especially relevant for APIs susceptible to instabilities or degradation induced by moisture, such as that due to atmospheric humidity.

## FORMULATION PRODUCT FINDER APP

Find the right product for your application with our Formulation Product Finder App at:  
[MerckMillipore.com/formulationapp](https://MerckMillipore.com/formulationapp)

# SAFC®

Pharma & Biopharma Raw  
Material Solutions



## THE PARTECK® EXCIPIENTS PRODUCT FAMILY

**Intelligent formulation made easy.**

Our Parteck® product portfolio includes 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)

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)

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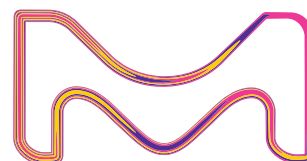
## The Emprove® Program

# Your fast track through regulatory challenges

Ensuring the compliance of your pharma and biopharma 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. The program includes 400 pharma raw and starting materials and a selection of filtration and single-use products, each with three dossiers to support qualification, risk assessment and process optimization – all designed to help you speed your way through the regulatory maze. Find out more at: [www.merckmillipore.com/emprove](http://www.merckmillipore.com/emprove)

## Ordering Information

Cat. No.	Product	Pack size
1.41517.1000	Parteck® COAT (Polyvinyl alcohol) EMPROVE® ESSENTIAL Ph Eur, ChP, JPE, USP	1 kg
1.41517.9025	Parteck® COAT (Polyvinyl alcohol) EMPROVE® ESSENTIAL Ph Eur, ChP, JPE, USP	25 kg



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