

Pharmaceutical Coatings

*Unique coating products
for oral applications*



Pharmaceutical Coating Range

Gastrosoluble film coating products

At Seppic we offer multiple ranges of ready-to-use, immediate release, aesthetic and functional film coatings with **HPMC** or **HPC** based agents.

- Manufactured according to IPEC-GMP guidelines
- EXCiPACT certified manufacturing processes
- Multicompendial components compliant to [Ph.Eur], [USP-NF]
- Titanium dioxide free options available (colored and non colored)
- Good adhesion of the film to the core
- Homogeneous dispersion
- Easy to use: fast and easy dispersion



SEPIFILM™ LP range (Moisture protection)

SEPIFILM™ LP is a **functional range** of ready-to-use gastrosoluble coating agents in **granule** form, for the film coating of moisture sensitive solid products (hygroscopic tablets, powder, pellets, granules, chewing-gums...).

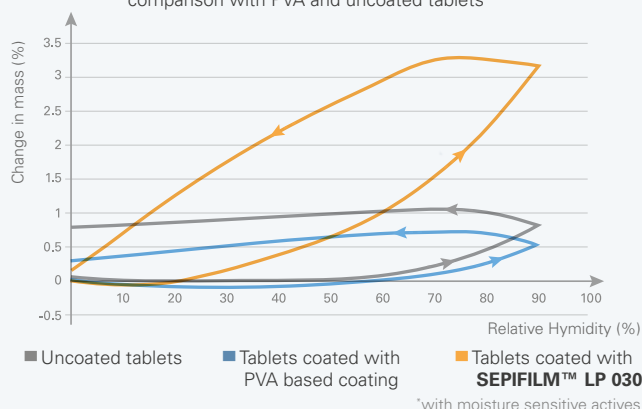
Tablets coated with SEPIFILM™ LP exhibit an **improved stability and resistance to moisture** of sensitive formulations and avoid undesirable interactions with API.

➤ 7 grades of SEPIFILM™ LP are available with different protection levels.

Clear Titanium dioxide free	SEPIFILM™ LP 010	[DMF type IV, n°14031]
	SEPIFILM™ LP 014*	
	SEPIFILM™ LP 007	
	SEPIFILM™ LP 030	
White With titanium dioxide	SEPIFILM™ LP 770*	[DMF type IV, n° 12524]
	SEPIFILM™ LP 761	
For organic media	SEPIFILM™ LP 914 (based on HPC)	

*SEPIFILM™ LP 014 and SEPIFILM™ 770 are the standard grades

Dynamic Vapor Sorption (DVS) recording of SEPIFILM™ protect tablets comparison with PVA and uncoated tablets*



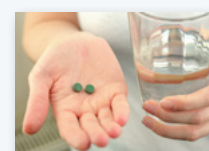
SEPIFILM™ LP are registered in the Inactive Ingredient Database: included in several FDA approved drug products.

- **Homogeneous dispersion:** Readily dispersible at 12% of dry content in water at room temperature, with only 1 hour of mixing time. No dust, no lumps and limited generation of foam.
- Application at 3-5% weight gain depending on the sensitivity of the cores.
- **Use with different solvents** SEPIFILM™ LP can be used for aqueous, organic or hydroalcoholic phases and different levels of moisture protection to achieve to suit to your formulation needs.

●●● Tips & Tricks | Colored coating with moisture protection



Possibility of color matching thanks to the addition of SEPIPERSE™ DRY or SEPIFILM™ PW in SEPIFILM™ LP (60% minimum) at 5% final weight gain to maintain moisture protection properties while obtaining bright colors.



SEPIFILM™ PW range (Aesthetic)

SEPIFILM™ PW are optimized film-coating formulations with individual ingredients that are blended into homogeneous **powder** for various benefits.

- Available in white, clear, titanium dioxide free and more than 10 colors.

- Fast and easy dispersion in water at a **dry content of 20%-25%**.
- Faster coating process: reduced film-coating time by 30% compared to classic HPMC-based film-coating.
- Good coverage at only 3% weight gain.
- No impact on the release of the API from the tablet.
- 4 years stability.
- Free-flowing powder for easy handling.

All colored SEPIFILM™ PW contain only one pigment for easier registration.

●●● Tips & Tricks

All SEPIFILM™ PW products are compatible with each other allowing the creation of infinite shades.

All grades can be mixed together & with SEPIFILM™ LP for colored moisture protection (5% of final weight gain) to maintain moisture protection properties while obtaining bright colors.

SEPIPERSE™ DRY range (Solid coloring agent) to combine with SEPIFILM™ Classic / LP / PW Clear / White TF

SEPIPERSE™ DRY are ready-to-use solid **coloring agents** for SEPIFILM™ or any other film-coating preparation.

- More than 25 references are available. 8 of which are titanium dioxide free. By combining these 25 references, we obtain an infinite number of colors.

- Contains high content of coloring agents.
- Excellent film strength and adhesion to the core for smooth finish.
- No delay in API liberation.

●●● Tips & Tricks

All grades can be mixed with each other or with white to obtain the desired shade

SEPIPERSE™ AS, AP (Liquid coloring agent) to combine with SEPIFILM™ Classic & LP

Ready-to-use liquid **coloring agents** for SEPIFILM™ or any other film-coating preparation.

SEPIFILM™ Classic range (Aesthetic)

SEPIFILM™ is an **aesthetic** range of coating systems.

- 3 standard grades: colorless titanium dioxide free + white or colored are available for pharmaceutical uses.

- Fast and easy dispersion in water at a dry content of 15%.
- Good coverage at only 3% weight gain.

SEPIFILM™ SC range (Sugar coating)

SEPIFILM™ SC is a ready-to-use sugar-coating agent to spray. To combine with SEPIPERSE™ AS for coloration.

SEPIFILM™ GLOSS range (Pearlescent)

All-in-one film coating to achieve superior **pearlescent effect** on tablets.

- Water dispersion and quick mixing time: 15 min.
- Possible mixtures with other colored dispersions.

●●● Tips & Tricks

SEPIFILM™ Gloss can be used on uncoated cores or white coated cores, but all SEPIFILM™ Gloss' power is revealed by applying it on a colored sub-coat.

Coating range in brief...

"Traditional" coating
(including TiO₂ free ingredients)

- SEPIFILM™ LP
- SEPIFILM™ PW
- SEPIFILM™ Classic
- SEPIFILM™ White TF

could be combined

- SEPIPERSE™ DRY
- SEPIPERSE™ AS, AP

Finish coating (optional)

- SEPIFILM™ GLOSS
- SEPIFILM™ SC



Titanium Dioxide Free range

To overcome the regulatory challenge on titanium dioxide, Seppic brings 'mineral free', 'talc free' - TiO_2 alternatives for your future coating formulation needs.

SEPIFILM™ White TF

New patented solution designed with unique ingredients to provide strong opacifying properties with a white color to the tablets without titanium dioxide.



- All components comply with the European, US and Japanese Pharmacopeia.
- Overall better regulatory acceptance.
- Weight gain 3 to 7% depending on the cores.
- Stable color - no yellowish effect.

SEPIFILM™ Classic Colorless / Clear

Aesthetic.

SEPIFILM™ PW Clear

Aesthetic.

SEPIFILM™ LP Clear

Moisture protection.

Coloring agents compatible with TiO_2 free range

SEPIPERSE™ DRY

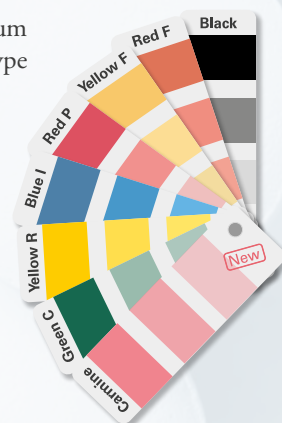
(8 references without titanium)

[to combine with all SEPIFILM™ \$\text{TiO}_2\$ free listed here](#)

A range of dry coloring agents based on HPMC, enable the personalization of coating solutions.

- 8 references titanium free with different type of pigments.

By combination of colors, we obtain an infinity of shades.



Colors available for the TiO_2 free coating range (non exhaustive).

••• Tips & Tricks

Multiple opportunities to keep formulating titanium free formulations while combining SEPIFILM™ with a range of other TiO_2 free color shades from Seppic.

Customized film coating & Technical support

Adaptability to specific requirements

Seppic is committed to support your developments with our excipients and unique expertise

- **Formulation assistance:**

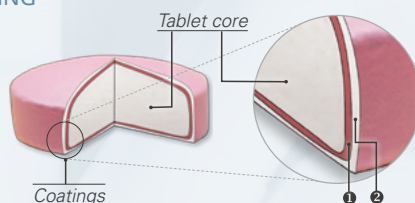
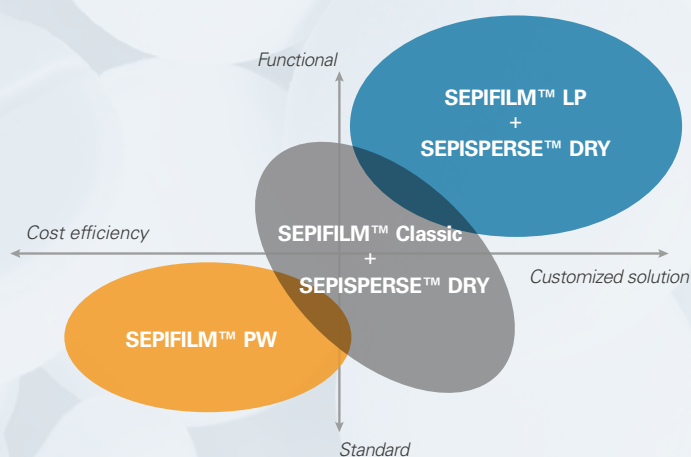
- Color matching trials from a drug sample or pantone code reference
- Lab coating applications on your cores
- On site coating support (lab scale, transposition...)

- **Personalized film-coating material** based on **Your composition & Your specifications.**



| How to choose the coating matching your needs?

RANGE MAPPING



© Doc@lyre

1 "Traditional" coating (including TiO₂ free ingredients)

- SEPIFILM™ LP
- SEPIFILM™ PW
- SEPIFILM™ Classic
- SEPIFILM™ WhiteTF

could be combined

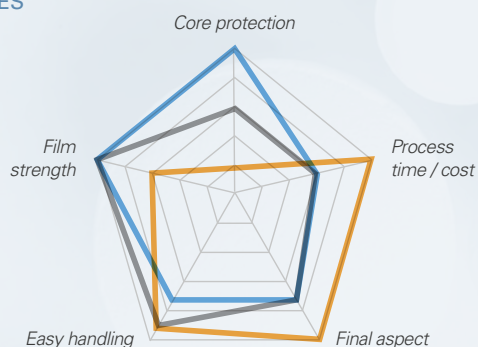
- SEPIPERSE™ DRY
- SEPIPERSE™ AS, AP

2 Finish coating (optional)

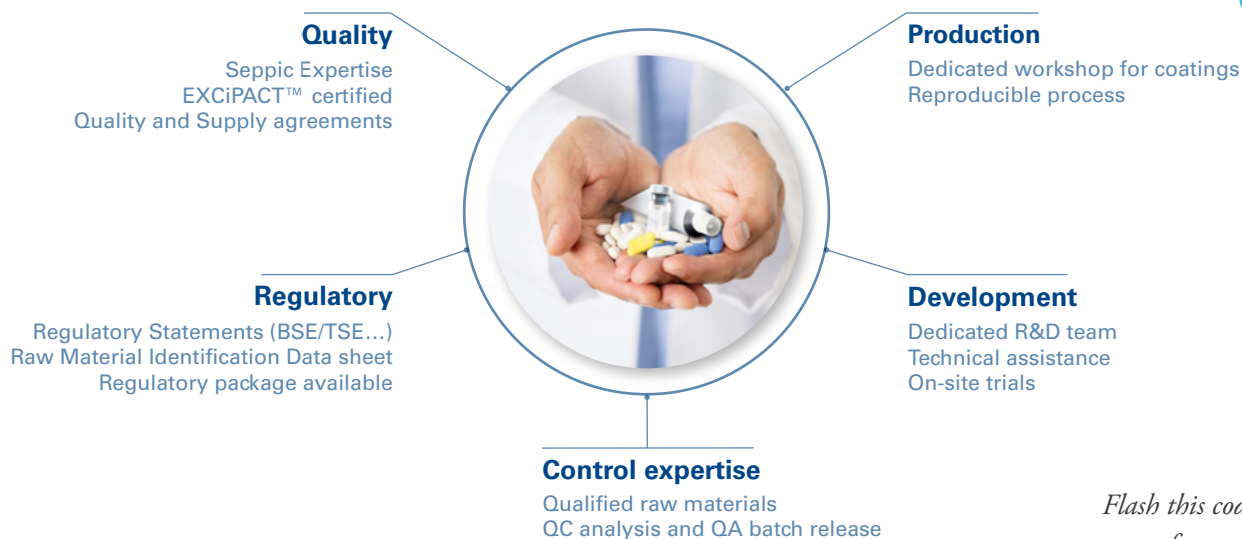
- SEPIFILM™ GLOSS
- SEPIFILM™ SC

PRODUCT FEATURES

Criteria	SEPIFILM™ PW	SEPIFILM™ Classic	SEPIFILM™ LP
Core protection	—	•	•••
Process time / cost	•••	••	••
Final aspect	•••	••	••
Easy handling	•••	•••	••
Film strength	••	•••	•••



Our pharmaceutical ingredients come with a full quality & regulatory package to support you in your registrations



IPEC: International Pharmaceutical Excipient Council
EXCiPACT : certification according to IPEC-PGQ GMP guidelines

Flash this code
for more
information



Nota :

The analytical specifications warranted are only those mentioned on the certificate of analysis supplied with each delivery of the product. Except as set forth above, Seppic* makes no warranties, whether express, implied of statutory, as to the product which is the subject of this document. Without limiting the generality, of the foregoing, Seppic* makes no warranty of merchantability of the product or of the fitness of the product for any particular purpose. Buyer assumes all risk and liability resulting from the use or sale of the product, whether singly or in combination with other goods. The information set forth herein is furnished free of charge and is based on technical data that Seppic* believes to be reliable. It is intended for use by persons having technical skill and their own discretion and risk. Since conditions of use are outside Seppic*'s control, Seppic* makes no warranties, express or implied, and assumes no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under or a recommendation to infringe any patents.

Air Liquide Healthcare is a world leader in medical gases, home healthcare, hygiene products and healthcare specialty ingredients. It aims to provide customers in the continuum of care from hospital to home with medical products, specialty ingredients and services that contribute to protecting vulnerable lives.

*Seppic being

Seppic S.A. - Paris

FRANCE
Tel: +33 (0)1 42 91 40 00
info.seppic@airliquide.com

Seppic S.A. - Castres

FRANCE
Tel: +33 (0)5 63 72 69 69
Fax : +33 (0)5 63 72 69 70

Seppic S.A. - Pontrieux

FRANCE
Tel: +33 (0)2 96 95 31 32
contact.biotechmarine@airliquide.com

Seppic S.A. - Lons

FRANCE
Tel: + 33 (0)5 59 13 04 20
contact-serdex@airliquide.com

Seppic S.A. - Villers-sur-Fère

FRANCE
Tel: +33 (0)1 42 91 40 00
info.seppic@airliquide.com

UNITED STATES- Seppic Inc.

UNITED STATES
Tel: +1 973 882 5597
us.seppic@airliquide.com

UNITED STATES - Polykon Manufacturing LLC

UNITED STATES
Tel: +1 804 624 9057
sharon.harper@airliquide.com

BRASIL - Seppic Brasil EQCI Ltda

BRASIL
Tel: +55 11 3252 3911
brasil.seppic@airliquide.com

COLOMBIA - Seppic Colombia SAS

COLOMBIA
Tel: +571 702 44 48
colombia.seppic@airliquide.com

GERMANY - Seppic GmbH

GERMANY
Tel: +49 (0)221 888824 0
germany.seppic@airliquide.com

ITALY - Seppic Italia Srl

ITALY
Tel: +39 02 38009110
italy.seppic@airliquide.com

POLAND - Seppic Office

POLAND
Tel: +48 22 11 60 759
poland.seppic@airliquide.com

CHINA - Seppic Shanghai Chemical Specialities Co.

CHINA
Tel: +86 (21) 64 66 01 49
china.seppic@airliquide.com

INDIA - Air Liquide India Holding Pvt Ltd

INDIA
Tel: + 91 22 61046464
india.seppic@airliquide.com

SINGAPORE - Seppic Office

SINGAPORE
Tel: +65 6378 5213
singapore.seppic@airliquide.com

JAPAN - Seppic Office

JAPAN
Tel: +81 3 6414 6725
japan.seppic@airliquide.com

KOREA - Seppic Office

Seoul, KOREA 06168
Tel: +82-2-3019-2569
korea.seppic@airliquide.com

© 2023 Seppic - Seppic is a subsidiary of the AIR LIQUIDE group

SEPPIC

A company
Air Liquide
HEALTHCARE

seppic.com