

BRIEF ON SEPISPERSE™ DRY

SEPISPERSE [™] DRY are **HPMC-based solid coloring agents** designed to be combined with SEPIFILM [™] or any other film coating preparation.

9 references titanium dioxide free are available. Multiple combinations are possible allowing to attend a wide color palette.

•

- Contains high content of coloring agents
- Excellent film strength and adhesion to the core for smooth finish



BRIEF ON SEPIFILM™ NATURALLY COLORED PW

SEPIFILM TM Naturally Colored PW are ready-to-use colored film-coatings. They are made of coloring foodstuffs which are concentrates of fruits, vegetables, edible plants and algae.

5 colors are available. They can be mixed with each other or with a white film-coating to obtain the desired color/shade.

Color additives	Azo dyes	Aluminium lakes
Synthetical colors	GMO	Titanium dioxide

SEPIFILM ™ Naturally Colored PW are perfect solutions for bright and natural colors for food supplements, without compromise on coating performance and color stability.



Pantone codes obtain<mark>ed with a product application of 100% with a 4.5% of weight gain on white placebos</mark>

Titanium dioxide free range

For many years now, we've been working on titanium dioxide free film coatings solutions. For colored coatings for example, many options are available based on **different natures of coloring agents**.



Pantone codes obtained with a product application of 100% with a 4.5% of weight gain on white placebos Pantone codes obtained with a product mix with Sepifilm 050 $\,$ + Sepisperse Dry (60/40) with a 3% of weight gain on white placebos

SEPIFILM ™ Naturally Colored PW range, SEPIFILM ™ WHITE TF, an alternative made from foodstuffs with fit perfectly to white film-coatings based on Natural or Clean-label formulations titanium dioxide 2 years shelf life 2 years shelf life TM SEPISPERSE DRY range, SEPIFILM ™ 050, clear HPMC-based different options of dry coloring agents film-coating for personalized coatings solutions 4 years shelf life SEPIFILM™LP SEPIFILM ™ LP range, perfect for SEPIFILM™ 050 SEPISPERSE TM moisture sensitive cores SEPIFILM™ WHITE TF DRY 4 titanium free products, 4 different levels of protection 3 years shelf life 4 years shelf life

BRIEF ON SEPIFILM™ WHITE TF

SEPIFILM ™ White TF is a white film-coating agent free from titanium dioxide, designed for food supplements in tablet form.

SEPIFILM TM White TF offers a new and efficient way to make white tablets and to effectively cover imperfections of tablet cores.

Its formula is based on ingredients well accepted and widely used within the food supplement industry.

- Overall better regulatory acceptance
- 3 to 7% weight gain depending on the cores
- No yellowish effect
- Can be colored mixing with SEPIFILM ™ Naturally Colored PW or SEPISPERSE ™ DRY

BRIEF ON SEPIFILM™ LP

SEPIFILMTM LP is a functional range of ready-to-use gastrosoluble coating agents in granule form. This range is designed to give an excellent level of moisture protection for sensitive cores.

4 grades of SEPIFILM™ LP clear are available with different protection levels. They can be mixed for colored moisture protective film-coatings:



- Homogeneous dispersion: readily dispersible at 12% of dry content in water at room temperature, with only 1 hour of mixing time
- Application at 3-5% weight gain depending on the sensitivity of the cores.
- Can be colored by mixing with SEPIFILM ™ Naturally Colored PW or SEPISPERSE ™ DRY
- Can be used as a moisture protective sublayer

BRIEF ON SEPIFILM™ 050

SEPIFILM TM 050 is a clear ready-to-use film-coating designed to give an excellent finish to food supplements. It presents an excellent film strength and adhesion while being easy to handle during the dispersion and coating process.

SEPIFILM ™ 050 can be used as diluent with SEPISPERSE ™ products range.

EXAMPLES OF SEPPIC TF COLORS



SEPIFILM LP 014



SEPIFILM WHITE TF



SEPIFILM WHITE TF & SEPISPERSE DRY YELLOW F



SEPIFILM NAT YELLOW PW



SEPIFILM NAT YELLOW PW & SEPIFILM NAT RED PW



SEPIFILM NAT YELLOW PW & SEPIFILM NAT RED PW



SEPIFILM NAT YELLOW PW & SEPIFILM NAT RED PW



SEPIFILM NAT YELLOW PW & SEPIFILM NAT RED PW



SEPIFILM LP 014 &
SEPISPERSE DRY YELLOW F
& SEPISPERSE DRY RED F



SEPIFILM LP 014 &
SEPISPERSE DRY YELLOW F
& SEPISPERSE DRY RED F



SEPIFILM WHITE TF &
SEPISPERSE DRY YELLOW F
& SEPISPERSE DRY RED F



SEPIFILM LP 014 &
SEPISPERSE DRY YELLOW F
& SEPISPERSE DRY RED F



SEPIFILM LP 030 & SEPISPERSE DRY PINK C



SEPIFILM LP 030 & SEPISPERSE DRY RED P



SEPIFILM WHITE TF & SEPISPERSE DRY RED P



SEPIFILM LP 014 & SEPIFILM NAT PINK PW



SEPIFILM NAT RED PW



SEPIFILM NAT PINK PW



SEPIFILM NAT BLUE PW & SEPIFILM NAT PINK PW



SEPIFILM NAT BLUE PW & SEPIFILM NAT PINK PW



SEPIFILM NAT BLUE PW & SEPIFILM NAT PINK PW



SEPIFILM NAT BLUE PW & SEPIFILM NAT PINK PW & SEPIFILM NAT YELLOW PW



SEPISPERSE DRY BLUE I



SEPIFILM NAT BLUE PW



SEPIFILM NAT BLUE PW & SEPIFILM NAT PINK PW



SEPIFILM NAT BLUE PW &
SEPIFILM NAT PINK PW



SEPIFILM NAT BLUE PW & SEPIFILM NAT RED PW



SEPIFILM NAT BLUE PW & SEPIFILM NAT GREEN PW



SEPIFILM NAT GREEN PW & SEPIFILM NAT YELLOW PW



SEPIFILM NAT GREEN PW



SEPISPERSE DRY GREEN C



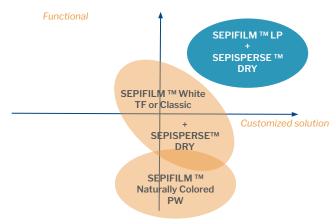
SEPIFILM 050 & SEPISPERSE DRY 5901 BROWN





How to choose a coating matching your needs?

Range mapping



Our nutraceuticals ingredients come with a full quality & regulatory package to support you in your developments



for each products



Development

Dedicated R&D team Technical assistance On-site trials

Production

Dedicated workshop for coatings Reproducible process

Control expertise Qualified raw materials QC analysis and QA batch release Flash this code for m 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 Nota: The analytical specifications' warranted are only those mentioned on the certificate of analysis supplied with each delivery of the product. Except as set rorth 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. Its is intended for use by persons having technical skill and their own discretion and risk. Since conditions of use are outside Seppic* 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 and healthcare specialty ingredients. It aims to provide customers in the continuum of care from hospital to home.

Seppic S.A. Paris establishment

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

Seppic S.A. **Castres establishment**

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

Seppic S.A. - Pontrieux Tel.: + 33 (0)2 96 95 31 32 contact.biotechmarine@airliquide.com

Seppic SA - Lons

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

Seppic SA - Villers-sur-Fère establishment

Tel.: + 33 (0)3 23 82 28 97 contact@epifrance.fr

UNITED STATES - Seppic INC. Tel.: +1 973 882 5597

us.seppic@airliquide.com

UNITED STATES - Polykon Manufacturing LLC

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

BRAZIL - Seppic Brasil EQCI Ltda

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

COLOMBIA - Seppic Colombia SAS

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

ITALIA - Seppic Italia Srl

Tel.: + 39 02 380 09 110 italv.seppic@airliquide.com

GERMANY - Seppic GmbH

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

POLAND - Seppic office

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

INDIA - Air Liquide India **Holding Pvt Ltd**

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

CHINA Seppic Shanghai Chemical Specialities Co. Tel.: +86 (21) 64 66 01 49

china.seppic@airliquide.com

SINGAPORE - Seppic office Tel.: +65 6378 5213

singapore.seppic@airliquide.com

JAPAN - Seppic office

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

KOREA - Seppic office Tel.: +82 2 3019 2569

korea.seppic@airliquide.com

