VIVACOAT®

Ready-to-Use Coating System
for Pharmaceutical Tablets

– High Quality –

Made in Germany
Made in USA

JRS PHARMA *The Global Excipient Maker* JRS FAMILY A Member of the JRS Group

BUSINESS UNIT COATINGS

VIVACOAT®
Ready-to-Use Coating System

High Quality – Made in Germany and USA

What is **VIVACOAT®** ?

- Fully formulated powder
- Ready-to-Use (just add the powder to water)
- For pharmaceutical application
- Customized color

What are the Benefits ?

- Raw materials from own production and qualified suppliers
- Qualified alternative sources for secured supply
- Highest quality standards - Made in Germany and USA
- Shorter process time
- Reduced costs
- Many basic formulations for fast development available
- Best quality at a reasonable price
- Batch to batch color consistency
- Color guarantee
- Free technical support locally
- Best performance of the coating on **your** tablet in **your** production

VIVACOAT® – Grades for Pharmaceutical Tablets

VIVACOAT®
Non functional Ready-to-Use coatings

VIVACOAT® A	High adhesion
VIVACOAT® M neo	Moisture barrier
VIVACOAT® X	eXtra elegance
VIVACOAT® C	Customer formulation

VIVACOAT® protect
High functional Ready-to-Use coatings

VIVACOAT® protect T	Taste masking	TASTE protect
VIVACOAT® protect U	UV protection	UV protect
VIVACOAT® protect W	Water vapor protection	H_2O protect
VIVACOAT® protect E	Enteric	ACID protect

VIVACOAT® A – High Adhesion

„Simplicity is the Ultimate Sophistication“

(Leonardo da Vinci)

VIVACOAT® is a robust film coating system which shows outstanding performance in both laboratory and production equipment.

Adhesion of the film on the tablet core often is an issue. Then **VIVACOAT® A** is the best option as it has been formulated to solve adhesion related challenges.

VIVACOAT® A shows outstanding adhesion to tablet cores achieved by using globally accepted excipients.

Low adhesion can be the reason for the frequently observed effect of „logo bridging“.

VIVACOAT® A leads to perfect logo definition. Furthermore, the sometimes problematic edges of the tablet are well-covered.

Short process times are achieved by utilising the high solids content of **VIVACOAT® A** (up to 20 % solids).

The unique combination of polymer and plasticizer allows the coated cores to „self polish“ in your equipment.

To get the best out of your equipment you are welcome to use our global technical support.

Please refer to **VIVACOAT®** – technical performance in this brochure.

Recommended Process Parameters

	Recon Level [%]	Inlet Temp [°C]	Tablet Bed Temp [°C]	Exhaust Temp. [°C]	Total Spray Rate [g/min]	Pan Speed [rpm]
Fully Perforated Pan, Batch size 800 g	15 - 18	65 - 70	34 - 40	38 - 45	3 - 4	5 - 8
Conventional Pan, Batch size 2000 - 3000 g	15 - 18	n.a	36 - 37	n.a.	8 - 10	4 - 6
Semi Perforated Pan, Batch size 18 - 20 kg	15 - 18	85 - 88	36 - 40	45 - 48	55 - 60	3 - 4
Fully Perforated Pan, Batch size 18 - 20 kg	15 - 18	75 - 78	34 - 38	43 - 45	60 - 70	3 - 4
Fully Perforated Pan, Batch size 100 - 120 kg	15 - 18	65 - 68	34 - 38	40 - 42	180 - 200	2 - 3
Fully Perforated Pan, Batch size 300 - 400 kg	15 - 18	65 - 68	34 - 38	40 - 42	500 - 600	1 - 2

Solid Content 17 %

VIVACOAT® M neo – Moisture Barrier

„Simplicity is the Ultimate Sophistication“
(Leonardo da Vinci)

Many APIs are sensitive towards hydrolysis and, thus, humidity lowers the activity of APIs.

VIVACOAT® M neo is optimized to protect a moisture sensitive tablet core against humidity.

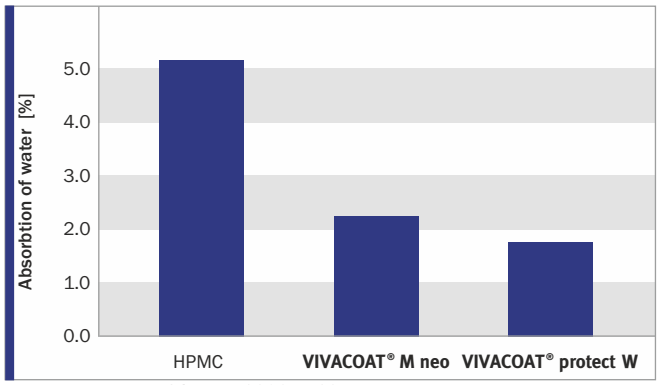
The best protection can be achieved by the combination of **VIVACOAT® M neo** and the correct type of protective packaging.

Moisture sensitive tablet cores require advanced knowledge and experience in choosing the best process parameters.

We offer a robust film coating system which shows outstanding performance in both the laboratory and in the production environment.

To get the best out of your equipment you are welcome to use our global technical support.

Please refer to **VIVACOAT®** – technical performance in this brochure.



Water-Absorption in 24 hours 30 °C / 60% rh

VIVACOAT® M neo

Recommended Process Parameters

	Recon Level [%]	Inlet Temp [°C]	Tablet Bed Temp [°C]	Exhaust Temp. [°C]	Total Spray Rate [g/min]	Pan Speed [rpm]
Fully Perforated Pan, Batch size 800 g	20	67	40 - 45	44 - 48	2 - 3	7 - 9
Conventional Pan, Batch size 2000 - 3000 g	20	n.a.	42 - 46	n.a.	10 - 15	ca 5
Semi Perforated Pan, Batch size 18 - 20 kg	20	68	40 - 45	46 - 49	55 - 60	3 - 4
Fully Perforated Pan, Batch size 18 - 20 kg	20	68	40 - 45	46 - 49	60 - 70	3 - 4
Fully Perforated Pan, Batch size 100 - 120 kg	20	68	40 - 45	46 - 49	180 - 190	2 - 3
Fully Perforated Pan, Batch size 300 - 400 kg	20	68	40 - 45	46 - 49	700 - 800	1 - 2

Solid Content 20 %

VIVACOAT® X – eXtra elegance

„Simplicity is the Ultimate Sophistication“

(Leonardo da Vinci)

A unique appearance to further enhance your OTC or nutritional product is required.
VIVACOAT® X is a perfect combination of extra elegance in coating and a competitive price.
VIVACOAT® X allows the application of an excellent optical effect in two simple ways:

1. **VIVACOAT® X** as a clear elegant top coat.
   VIVACOAT® X as a clear top coat on an already existing colored sub coat. Simply coat to a 0.5 % weight gain to get perfect elegance.
2. **VIVACOAT® X** as a one-step coating on an uncoated white or multi-layer tablet. Just add 0.5 % weight gain to get perfect elegance.

We offer a robust film coating system which shows outstanding performance in both laboratory and production equipment.

To get the best out of your equipment you are welcome to use our global technical support.

Please refer to **VIVACOAT®** – technical performance in this brochure.

Recommended Process Parameters

	Recon Level [%]	Inlet Temp [°C]	Tablet Bed Temp [°C]	Exhaust Temp. [°C]	Total Spray Rate [g/min]	Pan Speed [rpm]
Fully Perforated Pan, Batch size 800 g	10 - 12	65 - 68	33 - 36	38 - 43	2 - 3	6
Conventional Pan, Batch size 2000 - 3000 g	10 - 12	n.a	33 - 36	n.a.	10	5
Semi Perforated Pan, Batch size 18 - 20 kg	10 - 12	ca. 50	33 - 36	38 - 43	55	2.5
Fully Perforated Pan, Batch size 18 - 20 kg	10 - 12	70 - 72	33 - 36	40 - 43	60	3
Fully Perforated Pan, Batch size 100 - 120 kg	10 - 12	65 - 66	33 - 36	38 - 43	200	2
Fully Perforated Pan, Batch size 300 - 400 kg	10 - 12	65 - 66	33 - 36	38 - 43	600	1.5

Solid Content 12 %

VIVACOAT® C – YOUR Formulation in OUR Production

„Simplicity is the Ultimate Sophistication“
(Leonardo da Vinci)

The other types of **VIVACOAT®** are designed to offer a robust coating system at a very competitive price to your product development.

VIVACOAT® C offers contract manufacturing for your already existing coating formulations.

VIVACOAT® C covers

- Contract production of your formulation
- Optional: transfer from multi-step to one-step
- Optional: improving the performance of existing coating formulations

State-of-the-Art Production Equipment

Homogeneity is the ultimate goal priority when producing a Ready-to-Use Coating System.
The homogeneous distribution of liquids in a powder, and the smallest amounts of ingredients, can only be achieved by using state-of-the-art production equipment based on the latest mixing technology.
Failures, especially with the distribution of the pigments, can easily be recognized on the tablet surface.

VIVACOAT® is produced with state-of-the-art equipment in a GMP environment by well-trained experts.

Batch to Batch Consistency and Color Guarantee

Color is the challenge for your coating.

Even minor changes in the color of the raw materials used can have an influence on the color of your coating. Once agreed on a specific color we guarantee that you receive the same color with every delivery.

This is controlled by IPC (in-Process Control) during the production.

During the sampling process a specific **VIVACOAT®** film is created as the ”master”. During production every batch is compared to the original ”master” batch to avoid batch to batch color variations.

With every batch we guarantee that the color of the coating on your tablets is the same as supplied in the original request.

Cost Reduction

Changing from an in-house formulation to a **VIVACOAT®** Ready-to-Use Coating.

Each of your products will have its own calculation, a part of this will be the coating.

By using **VIVACOAT®** Ready-to-Use Coatings you can reduce your expenditure in R&D, administration, purchasing, quality assurance and production.

Give us the opportunity to offer a high quality product from our state-of-the-art production at a very competitive price.

VIVACOAT® as an alternative to in-house coatings

Please refer to **VIVACOAT®** – technical performance in this brochure.

Improving coating performance with **VIVACOAT®**

Please refer to **VIVACOAT®** – technical performance in this brochure.

VIVACOAT® protect

Ready-to-Use High Functional Coating System

VIVACOAT® protect T – Taste Protection

„Simplicity is the Ultimate Sophistication“

(Leonardo da Vinci)

For best patient compliance, it is important that an oral dosage form is organoleptically neutral. To cover the bitter or unpleasant of drugs, JRS developed a taste masking ready-to-use coating **VIVACOAT® protect T**.

VIVACOAT® protect T is an immediate release coating with excellent taste masking properties. It is designed for pharmaceutical applications. Using conventional coating equipment, the easy application of **VIVACOAT® protect T** enables high spray rates and gives a competitive advantage to your product.

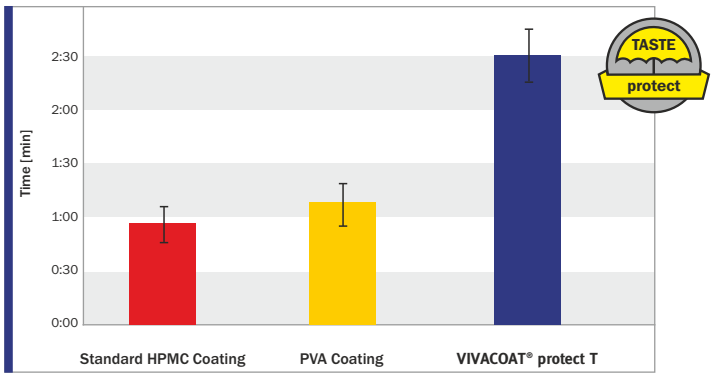
Please contact our global technical service for further support.
For colored tablets, pigmented **VIVACOAT® A** formulations are ideally suited to be used as a top-coat.

Product Performance Profile

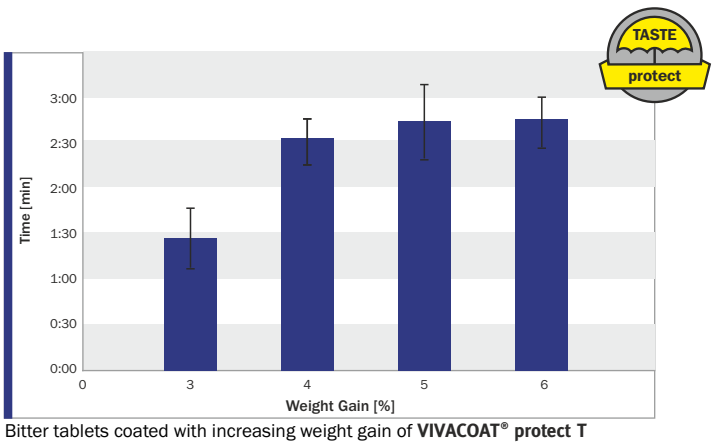
To investigate the taste masking properties of **VIVACOAT® protect T**, tablets containing denatonium benzoate were coated with three coatings based on different polymers at a 4 % weight gain.

Tablets were also coated with different weight gains of **VIVACOAT® protect T**.

Using a panel of volunteers, time was measured from the moment the tablet was placed under the tongue until a bitter taste was reported.



Bitter tablets coated with different coatings to 4 % weight gain



Bitter tablets coated with increasing weight gain of **VIVACOAT® protect T**

Recommended Process Parameters

	Recon Level [%]	Inlet Temp [°C]	Tablet Bed Temp [°C]	Exhaust Temp. [°C]	Total Spray Rate [g/min]	Pan Speed [rpm]
Fully Perforated Pan, Batch size 800 g	17	67	34 - 39	39 - 44	3 - 4	7 - 9
Conventional Pan, Batch size 2000 - 3000 g	17	n.a.	42 - 45	n.a.	12 - 15	ca 5
Semi Perforated Pan, Batch size 18 - 20 kg	17	70 - 80	42 - 44	60 - 65	45 - 50	3 - 4
Fully Perforated Pan, Batch size 18 - 20 kg	17	65 - 75	40 - 42	44 - 46	55 - 60	3 - 4
Fully Perforated Pan, Batch size 100 - 120 kg	17	65 - 66	34 - 39	38 - 43	160 - 170	2 - 3
Fully Perforated Pan, Batch size 300 - 400 kg	17	65 - 66	34 - 39	42 - 44	600 - 700	1 - 2

Solid Content 17 %

VIVACOAT® protect

Ready-to-Use High Functional Coating System

VIVACOAT® protect U – UV-Protection

„Simplicity is the Ultimate Sophistication“

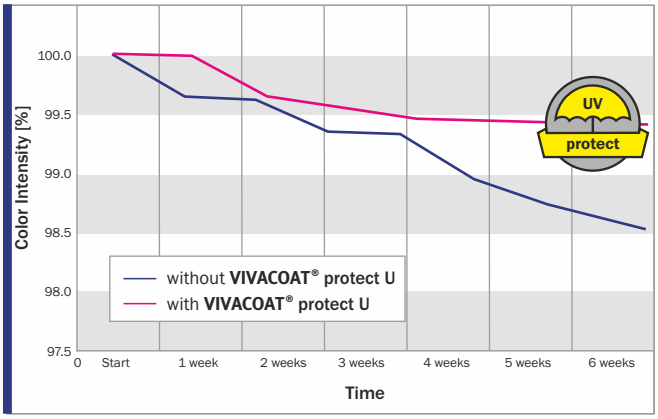
(Leonardo da Vinci)

VIVACOAT® protect U provides an effective protection against fading of natural colors caused by UV light.

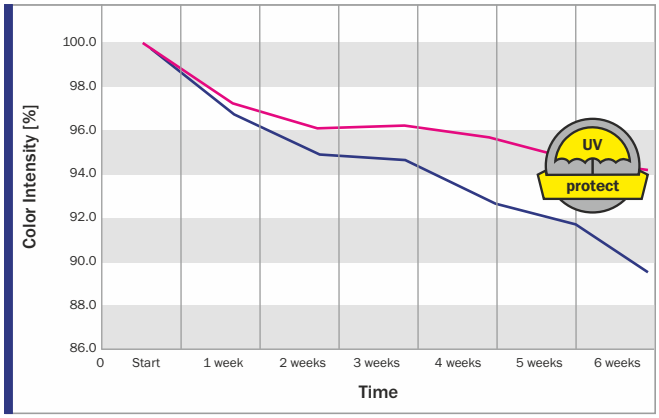
VIVACOAT® protect U is designed to diminish the light related degradation of natural colorants. Its composition is HPMC based and can be used both aqueously and in partly solvent systems.

VIVACOAT® protect U can be applied on top of a subcoat based on natural colors (riboflavin, chlorophyll, carotin, fruit-and vegetable extracts...).

Product Performance Profile



Color fading natural blue coated tablets



Color fading natural yellow coated tablets

Natural pigments + top-coat **VIVACOAT® protect U** after 6 weeks exposed to daylight

Recommended Process Parameters

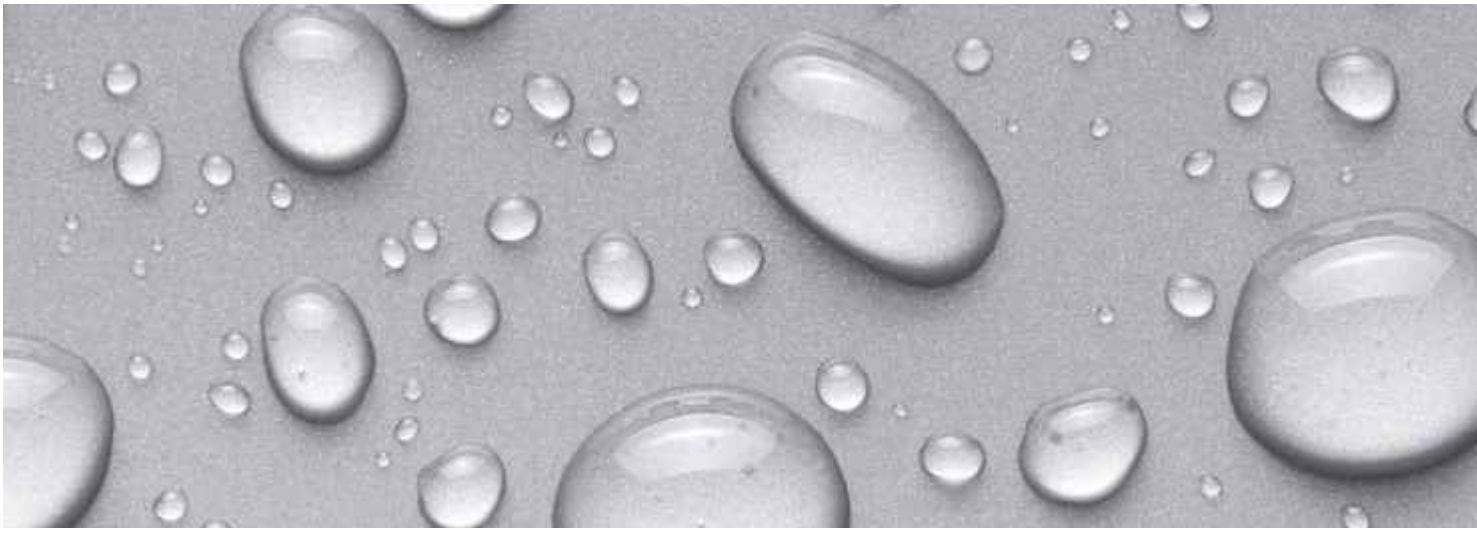
	Recon Level [%]	Inlet Temp [°C]	Tablet Bed Temp [°C]	Exhaust Temp. [°C]	Total Spray Rate [g/min]	Pan Speed [rpm]
Fully Perforated Pan, Batch size 800 g	12	68	33 - 36	38 - 43	3 - 4	7 - 9
Conventional Pan, Batch size 2000 - 3000 g	12	n.a.	38 - 40	n.a.	12 - 17	ca 5
Semi Perforated Pan, Batch size 18 - 20 kg	12	60 - 70	36 - 38	50 - 55	50 - 60	3 - 4
Fully Perforated Pan, Batch size 18 - 20 kg	12	55 - 65	33 - 36	40 - 43	60 - 70	3 - 4
Fully Perforated Pan, Batch size 100 - 120 kg	12	55 - 65	33 - 36	40 - 43	170 - 180	2 - 3
Fully Perforated Pan, Batch size 300 - 400 kg	12	55 - 65	33 - 36	40 - 43	700 - 800	1 - 2

Solid Content 12 %

VIVACOAT® protect

Ready-to-Use High Functional Coating System

VIVACOAT® protect W – Water Vapor Protection



„Simplicity is the Ultimate Sophistication“

(Leonardo da Vinci)

Many APIs are sensitive to moisture. Moisture can cause chemical degradation and/or physical changes to your API. This is especially problematic in areas with high humidity or when the tablets are removed from their original packaging. To improve drug stability and the shelf life of your product JRS developed an advanced moisture barrier coating **VIVACOAT® protect W**.

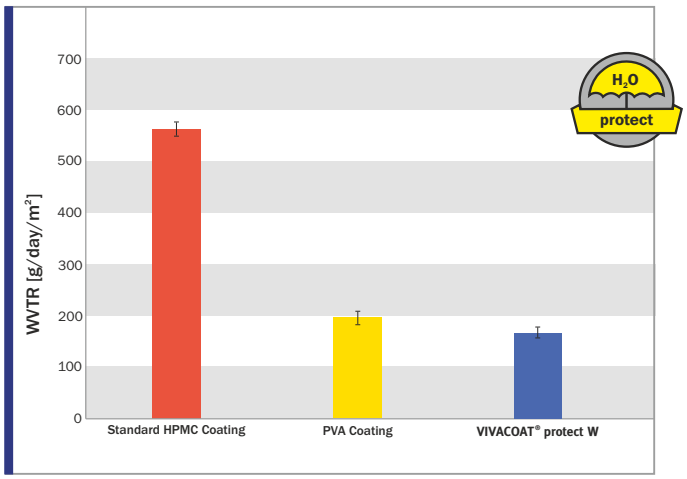
VIVACOAT® protect W is an immediate release coating with excellent moisture protection. It is designed for pharmaceutical applications.

VIVACOAT® protect W enables high spray rates and does not cause problems with tackiness.

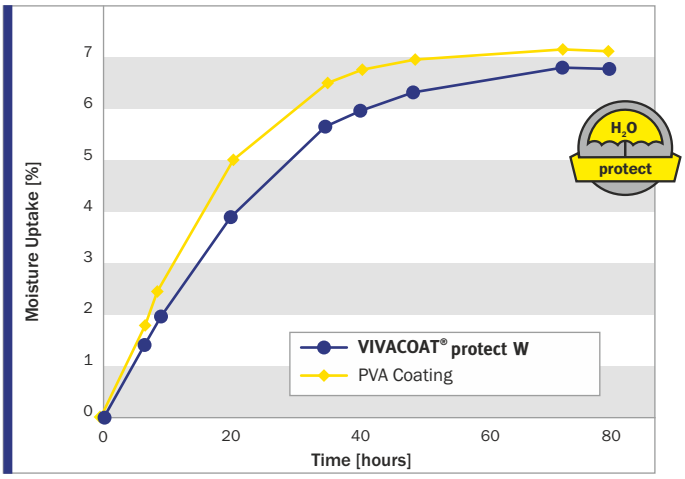
You are welcome to contact our global technical service for further support.

For colored tablets, pigmented **VIVACOAT® A** formulations are ideally suited to be used as a top-coat.

Product Performance Profile

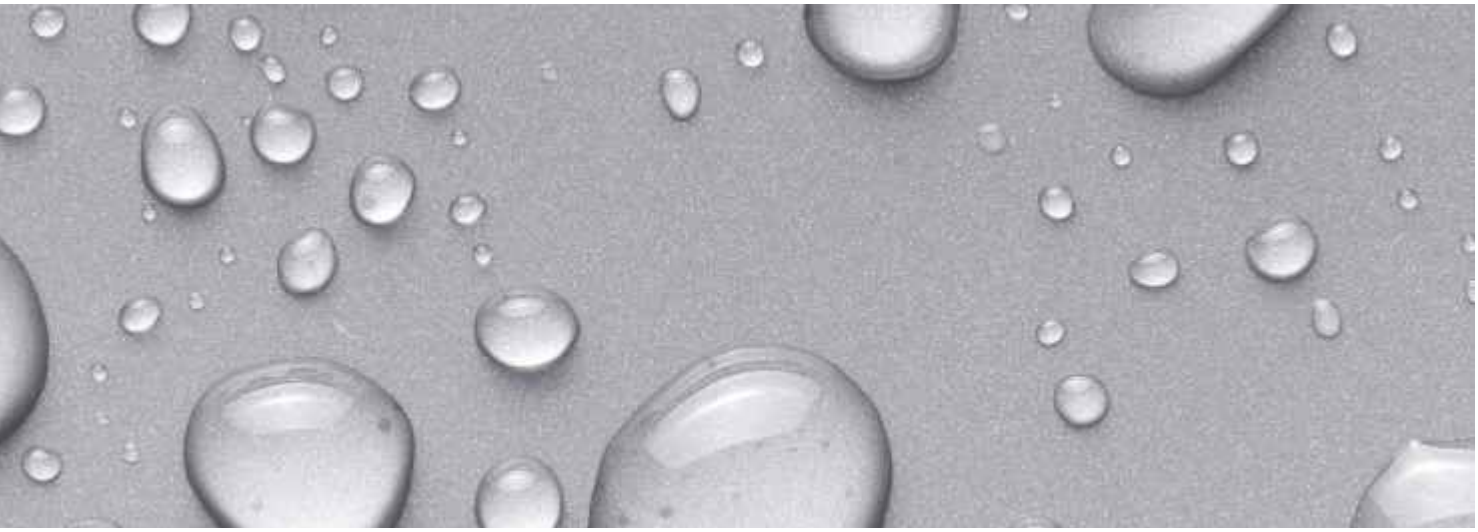


Water Vapor Transmission Rate



Moisture Uptake of Plant Extract Tablets Stored at 40 °C, 75 % R.H.

VIVACOAT® W



Recommended Process Parameters

	Recon Level [%]	Inlet Temp [°C]	Tablet Bed Temp [°C]	Exhaust Temp. [°C]	Total Spray Rate [g/min]	Pan Speed [rpm]
Fully Perforated Pan, Batch size 800 g	17	67	34 - 39	39 - 44	3 - 4	7 - 9
Conventional Pan, Batch size 2000 - 3000 g	17	n.a.	42 - 45	n.a.	12 - 15	ca 5
Semi Perforated Pan, Batch size 18 - 20 kg	17	70 - 80	42 - 44	60 - 65	45 - 50	3 - 4
Fully Perforated Pan, Batch size 18 - 20 kg	17	65 - 75	40 - 42	44 - 46	55 - 60	3 - 4
Fully Perforated Pan, Batch size 100 - 120 kg	17	65 - 66	34 - 39	38 - 43	160 - 170	2 - 3
Fully Perforated Pan, Batch size 300 - 400 kg	17	65 - 66	34 - 39	42 - 44	600 - 700	1 - 2

Solid Content 17 %

VIVACOAT® protect

Ready-to-Use High Functional Coating System

VIVACOAT® protect E – Acid Protection

„Simplicity is the Ultimate Sophistication“

(Leonardo da Vinci)

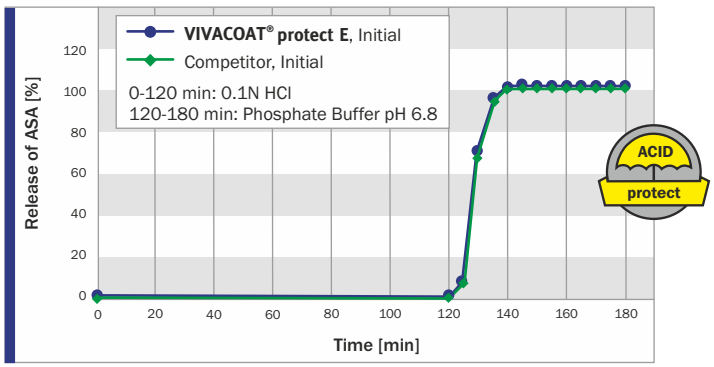
VIVACOAT® protect E is a white Ready-to-Use enteric coating system based on the globally accepted Methacrylic Acid-Ethyl Acrylate copolymer (1:1).
VIVACOAT® protect E dissolves at pH values exceeding 5.5. It was developed to protect acid-sensitive APIs against gastric fluids. Likewise, it protects the stomach against irritating actives by delaying drug delivery until the dosage form reaches the small intestine.
The **VIVACOAT® protect E** system requires no neutralization. This enables an easy one-step reconstitution in water. Due to the high polymer content of the coating suspension, **VIVACOAT® protect E** provides short process times.

VIVACOAT® protect E is the ideal solution for delayed release oral dosage forms. Time savings in development and production are achieved by a simple, fast and robust coating process. Also beneficial are reduced raw material inventory and QC requirements.

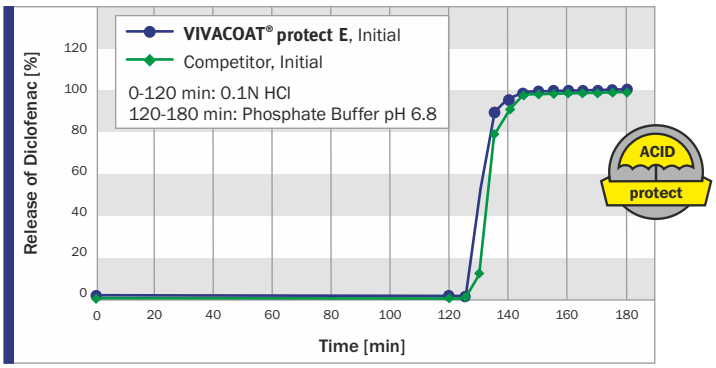
We recommend **VIVACOAT®** PS-1P-041 as a sub-coat formulation, if the active ingredient has to be separated from the enteric polymer. For colored tablets, pigmented **VIVACOAT® A** formulations are ideally suited to be used as a top-coat.

For technical support in lab- and production scale please reach out to JRS PHARMA's global technical team. Contact us to obtain your sample of **VIVACOAT® protect E**.

Product Performance Profile



USP Delayed Release Dissolution Test:
100 mg Acetyl Salicylic Acid Tablets with Enteric Coating



USP Delayed Release Dissolution Test:
50 mg Diclofenac Tablets with Enteric Coating

Recommended Process Parameters

	Recon Level [%]	Inlet Temp [°C]	Tablet Bed Temp [°C]	Exhaust Temp. [°C]	Total Spray Rate [g/min]	Pan Speed [rpm]
Fully Perforated Pan, Batch size 800 g	20	58	30 - 33	35 - 38	2 - 3	7 - 9
Conventional Pan, Batch size 2000 - 3000 g	20	n.a.	35 - 38	n.a.	10 - 15	ca 5
Semi Perforated Pan, Batch size 18 - 20 kg	20	50 - 60	32 - 34	46 - 49	55 - 60	3 - 4
Fully Perforated Pan, Batch size 18 - 20 kg	20	45 - 55	30 - 33	42 - 44	60 - 70	3 - 4
Fully Perforated Pan, Batch size 100 - 120 kg	20	45 - 55	30 - 33	42 - 44	180 - 190	2 - 3
Fully Perforated Pan, Batch size 300 - 400 kg	20	45 - 55	30 - 33	42 - 44	700 - 800	1 - 2

Solid Content 20 %

VIVACOAT®
Ready-to-Use Coating System

VIVACOAT® – Technical Performance

The Technical Performance of VIVACOAT®

- Highest quality
- Robust formulations for lab and production scale
- Free global technical service
- Professional formulation development
- Professional color management

Technical Service

The coating process is the final step of the value creation chain in your production. Therefore, the entire product value is endangered by the coating process.

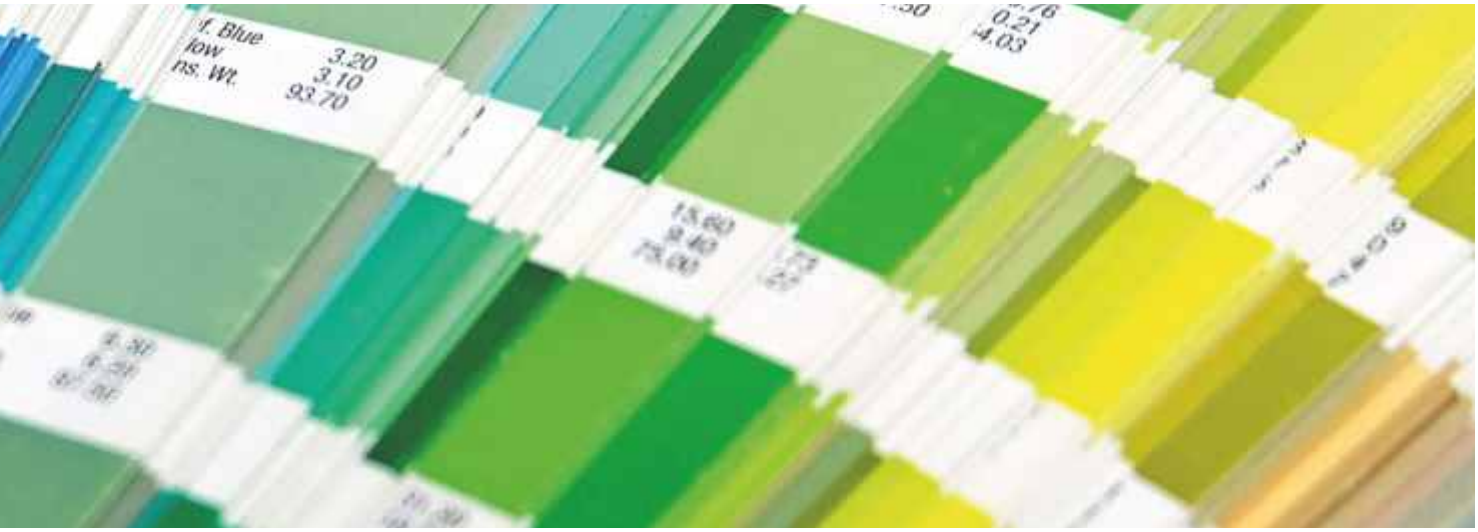
Coating tablets is a dynamic procedure with many parameters which are linked together. Achieving good results requires a process that does neither promote over-wetting nor spray drying. Beside well-adjusted process parameters a high-quality film coating system is required.

VIVACOAT® is a robust film coating system which shows outstanding performance in both your lab and production environment.

To achieve the best possible results if using **VIVACOAT®** in your own equipment you are welcome to use the services of our highly experienced global technical support. Our experts can support you, at your own facility, free of charge whenever performing trials with **VIVACOAT®**.

Free technical support with VIVACOAT®

- Small scale coating trials
- Assistance in optimization of your Production coating process
- Film coating training courses at
  - JRS Coating labs
  - Your own facility
  - Seminars held all over the world



Formulation Development

For new coating projects we offer a formulation development service. Well-trained and experienced experts will develop a robust coating formulation for you, meeting the functionality and color you have requested, which works under lab conditions as well as in your production environment.

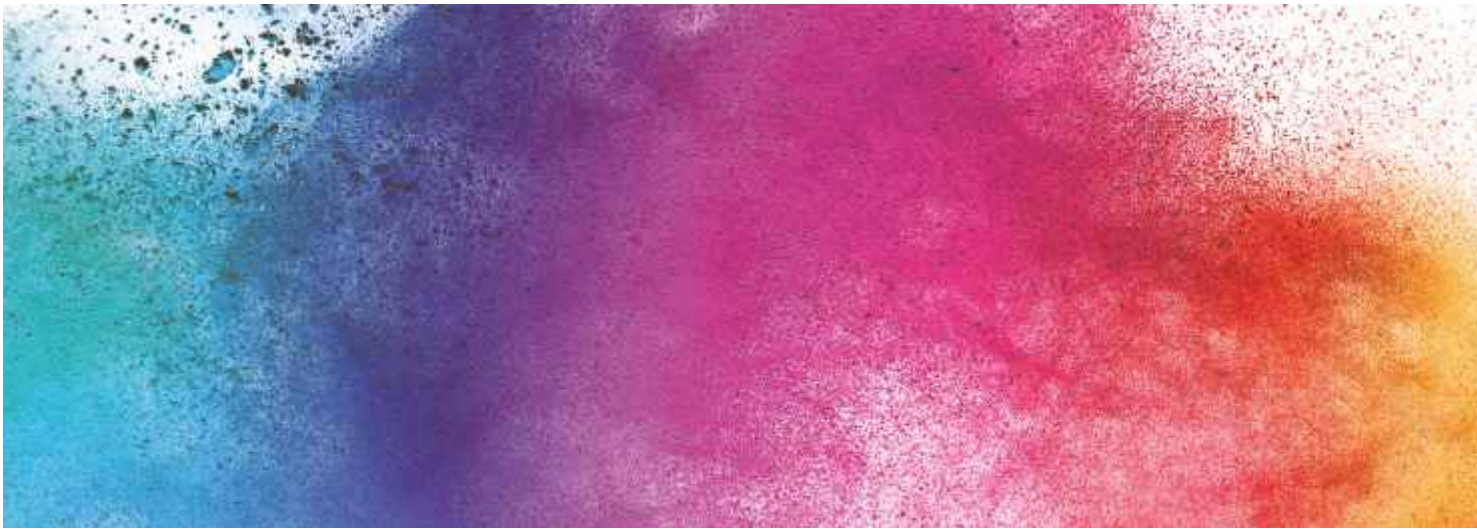
How to get a "customized" VIVACOAT® sample

To request a **VIVACOAT®** sample, please contact your local JRS partners. They will guide you through the sample request form in order to collect all the important information we need to develop your customized **VIVACOAT®**.

Our global technical service covers:

- Formulation development adhesion, protection against moisture, oxygen, bad taste...
- Coating trials
- Colormatch
  considering regulatory environment
- Contract manufacturing
  your inhouse formulation in our production
- Customer seminars
- Film coating training courses
  in your facility / in our lab

VIVACOAT® – Technical Performance



Application Support

We want **VIVACOAT®** to perform perfectly on your tablet. To get the best out of your equipment you are welcome to use our technical support.

Benefit from our global experience

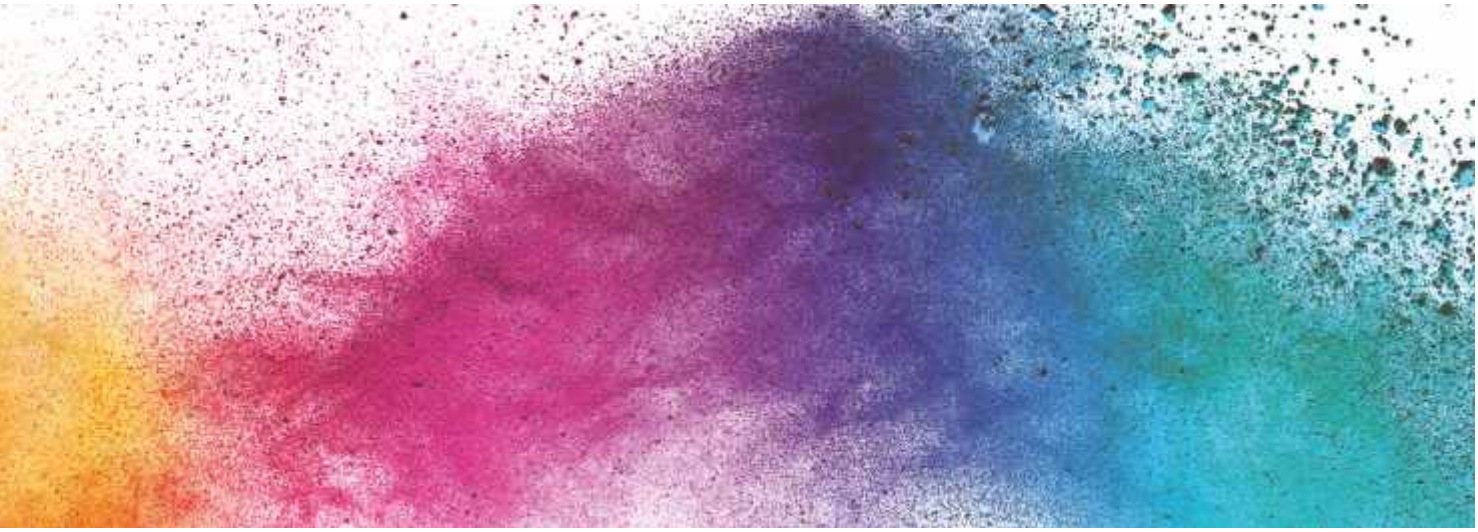
- Application labs in Germany, USA and many more
- Experienced experts
- Lab coating equipment starting with 700 g batch size

VIVACOAT® is an aqueous film coating system. If you are using organic solvents (e.g. alcohol) please inform us already when asking for a sample. Process parameters change depending on solvent.

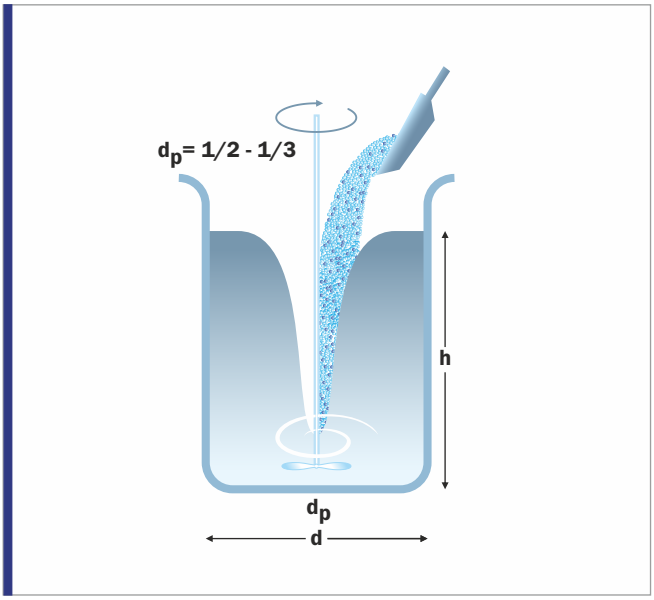
When changing from an in-house coating to **VIVACOAT®** Ready-to-Use Coating System, please keep in mind that the suspensions have to be prepared in a different but very easy way. How to prepare **VIVACOAT®** is shown in the following reconstitution profile.

Process Parameters

With every sample we provide you with specific process parameters recommended for lab equipment. As part of our application support, our experts can recommend process parameters for your production equipment as well.

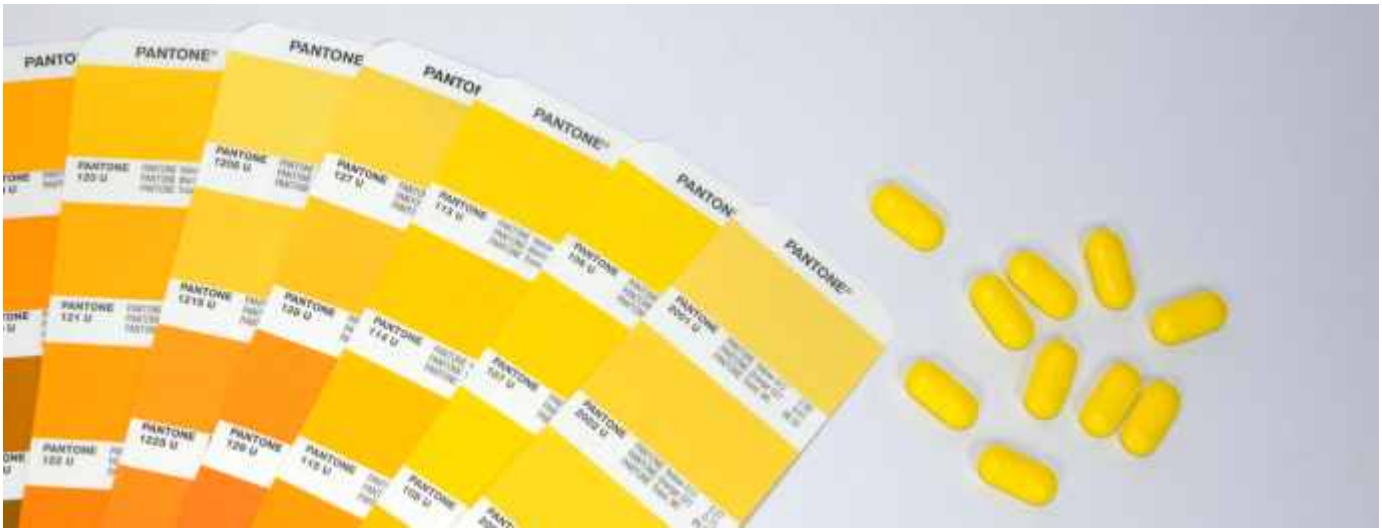


Reconstitution Procedure with Propeller Stirrer



1. The diameter (dp) of the stirrer blades should be 30 % – 50 % of the vessel.
2. Do not use a high shear mixer or a magnetic stirrer.
3. Create a deep vortex in the calculated amount of water.
4. Adjust the rotation speed to avoid pulling air into the water.
5. Add the calculated amount of **VIVACOAT®** directly into the center of the vortex.
6. The suspension is ready to use after 45 minutes of stirring.

VIVACOAT® – Technical Performance



High Quality

2 production sites:
- JRS PHARMA Germany, Weissenborn
- JRS PHARMA USA, Patterson

VIVACOAT® provides high performance on your tablet. It has been designed as a Ready-to-Use film coating System including all of the necessary excipients to create a high quality film.

Expertise

VIVACOAT® is designed to perform with a wide range of film coating equipment to meet your specific requirements. Our experienced coating experts guarantee a high quality product.
During the production of **VIVACOAT®** the color is matched by our experts.

Selection of ingredients

The components of **VIVACOAT®** are chosen under specific criteria:

- Regulatory acceptance in the target countries
- Full documentation
- Approved and qualified suppliers
- Approved security of supply

Complex formulations require complex parameters and conditions. **VIVACOAT®** is designed to work reliably in your equipment. We choose high qualitiy components which promote reliability.

State-of-the-art production equipment

Homogeneity is the priority when producing a Ready-to-Use Coating System. The homogeneous distribution of liquids in a powder, and the smallest amounts of ingredients, can only be achieved by using state-of-the-art production equipment using the latest mixing technology. Failures, especially with the distribution of the pigments, can easily be recognized on the tablet surface.

VIVACOAT® is produced with state-of-the-art equipment in GMP environment by well-trained experts.

Our sample production equipment is harmonized with our commercial production equipment to guarantee the same color and performance of commercial quantities of **VIVACOAT®** to the samples provided before.

Choosing a color

The appearance of a tablet represents the product quality.

What makes a tablet good-looking ?

- Smoothness of the surface
  The final appearance of a tablet depends on the quality of the initial tablet surface. For example a film coating on an uneven tablet surface will still appear uneven.
- Gloss
  The smoother the initial tablet surface, the higher the gloss. A shiny tablet gives the impression that it is easier to swallow.
- Color
  The selection of color is subject to market trends. Regulatory restrictions in the target markets and stability of the pigments used have to be taken into consideration.

Doing a colormatch

Matching a color to customize **VIVACOAT®**.

Requirements

A sample of coated tablets or a color reference from a standardized color guide, (we recommend PANTONE® Color Guide, Solid uncoated). In the case of sending us a reference color without a tablet sample, please confirm the color of the tablet core as well. Particularly dark cores can influence the final appearance of light colored coatings.

In a case where the final color has not yet been decided, but you want to test the functionality of the coating in advance, we recommend that a **VIVACOAT®** basic color (clear, white, yellow, red, green or blue) will be tried first.

How to judge a color

The visual perception of a color is dependent on the illumination of the object. The color spectrum of the ambient light has an influence on the appearance of the color (this is called Metamerism). Whenever possible please use daylight (5300 – 6500 Kelvin) when checking colors.

Other factors on the appearance of the color

Gloss and surface
In a direct comparison conditions of the same color on objects with differing surfaces, they may appear different. Therefore the color of **VIVACOAT®** can only be judged as a film on your tablet in daylight conditions.

Batch to batch color consistency & color guarantee

Color is the challenge for your coating. Even minor changes in the color of the raw materials used can have an influence on the color of your coating.

Once agreed on a specific color we guarantee that you receive the same color with every delivery.
This is controlled by IPC (In-Process Control) during the production.

Out of the produced sample, a specific **VIVACOAT®** film is created as the ”master”. During production every batch is compared to the original ”master” batch to avoid batch to batch color variations.

With every batch we guarantee that the color of the coating on your tablets is the same as supplied in the original request.

Form of Delivery

Packaging

VIVACOAT® is available in 25 kg PE inlined cartons.

For details, please contact
JRS PHARMA customer service:
E-mail: filmcoating@jrspharma.de

Sample Size

Free
Product Samples
TEST IT NOW !!!

Sample in plastic can 500 g,
with PE inliner and
re-usable cable ties

Looking for polymers for coating ?

VIVAPHARM® HPMC
VIVAPHARM® PVA

Contact Headquarters Germany

JRS PHARMA GMBH + CO KG
Business Unit Coatings & MR Technologies

Email: Filmcoating@JRSPharma.de
Phone: +49 7967 152-444

JRS PHARMA

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Global Network

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