

NATURAL & BIODEGRADABLE INGREDIENTS



ALTERNATIVE TO SYNTHETIC POWDERS

Like Silica, PMMA, Nylon, Boron Nitride, Silicone and PE Powder

Functions

Increase of smoothness, fluidity and lubricity
Absorption
Mattifying

Design

Ultrafine Microcrystalline Cellulose
Fruit Fibers
ECOCERT/COSMOS



Selection

	VIVAPUR® CS 4 FM <input checked="" type="checkbox"/>	VIVAPUR® CS 9 FM <input checked="" type="checkbox"/>	VIVAPUR® CS Sensory 5 <input checked="" type="checkbox"/>	VIVAPUR® CS Sensory 15 S <input checked="" type="checkbox"/>
INCI	Microcrystalline Cellulose	Microcrystalline Cellulose	Microcrystalline Cellulose	Microcrystalline Cellulose, Cellulose Gum
Color	White	White	White	White
Appearance	–	–	–	–
Structure	Particle	Particle	Pearls	Pearls
Particle size	4 µm	9 µm	5 µm	15 µm
Viscosity (2%)	–	–	–	–
Clarity	–	–	–	–
Bulk density	150 g/l	190 g/l	190 g/l	550 g/l
Specific density	1.5 g/cm ³	1.5 g/cm ³	1.5 g/cm ³	1.5 g/cm ³
Heavy metals	Max. 10 ppm	Max. 10 ppm	Max. 10 ppm	Max. 10 ppm
Total aerobic microbial count	1 x 10 ² cfu/g	1 x 10 ² cfu/g	1 x 10 ² cfu/g	1 x 10 ² cfu/g
Total yeasts moulds count	1 x 10 ² cfu/g	1 x 10 ² cfu/g	1 x 10 ² cfu/g	1 x 10 ² cfu/g
Water binding capacity	5.5 g/g	4.5 g/g	4.5 g/g	4 g/g
Oil binding capacity	2.5 g/g	4 g/g	2.5 g/g	1 g/g
Acid stability	●	●	●	●
Alkali stability	●	●	●	●
Fastness to light	●	●	●	●
CAS-No	9004-34-6	9004-34-6	9004-34-6	9004-34-6 9004-32-4
Packaging	10 kg bag	15 kg bag	15 kg bag	20 kg bag
Pallet weight	180 kg	270 kg	270 kg	360 kg
Minimum order quantity	10 kg	15 kg	15 kg	20 kg



highly
recommended




stable




limited

VITACEL® CS 5 Apple <input checked="" type="checkbox"/>	VITACEL® CS 5 Oat	VITACEL® CS 7 Orange	VITACEL® CS 8 Green Tea	
Pyrus Malus Fiber	Avena Sativa Bran	Citrus Aurantium Dulcis (Orange) Peel Powder	Camellia Sinensis Leaf Powder	INCI
Brown	Off-white	Beige	Green	Color
–	–	–	–	Appearance
Particle	Particle	Particle	Particle	Structure
5 µm	5 µm	7 µm	8 µm	Particle size
–	–	–	–	Viscosity (2%)
–	–	–	–	Clarity
180 g/l	140 g/l	200 g/l	200 g/l	Bulk density
1.5 g/cm ³	1.5 g/cm ³	1.5 g/cm ³	1.5 g/cm ³	Specific density
Max. 10 ppm	Max. 10 ppm	Max. 10 ppm	Max. 10 ppm	Heavy metals
1 x 10 ² cfu/g	1 x 10 ² cfu/g	1 x 10 ² cfu/g	5 x 10 ² cfu/g	Total aerobic microbial count
1 x 10 ² cfu/g	1 x 10 ² cfu/g	1 x 10 ² cfu/g	1 x 10 ² cfu/g	Total yeasts moulds count
5 g/g	5 g/g	5.5 g/g	–	Water binding capacity
1 g/g	2 g/g	1 g/g	–	Oil binding capacity
●	●	●	●	Acid stability
●	●	●	●	Alkali stability
●	●	●	●	Fastness to light
85251-63-4	84012-26-0	Not relevant	Not relevant	CAS-No
15 kg bag	15 kg bag	15 kg bag	15 kg	Packaging
150 kg	150 kg	150 kg	150 kg	Pallet weight
15 kg	15 kg	15 kg	15 kg	Minimum order quantity

Characteristics

	VIVAPUR® CS 4 FM <input checked="" type="checkbox"/>	VIVAPUR® CS 9 FM <input checked="" type="checkbox"/>	VIVAPUR® CS Sensory 5 <input checked="" type="checkbox"/>	VIVAPUR® CS Sensory 15 S <input checked="" type="checkbox"/>
ECOCERT/COSMOS 	Available	Available	Available	Available
Biodegradable	Readily	Readily	Readily	Readily
Ecofriendly	Yes	Yes	Yes	Yes
Natural origin	Wood	Wood	Wood	Wood
Safe and edible	Yes	Yes	Yes	Yes
Odor	Odor free	Odor free	Odor free	Odor free
Taste	Tasteless	Tasteless	Tasteless	Tasteless
Solubility in water	Insoluble	Insoluble	Insoluble	Insoluble
Solubility in oil	Insoluble	Insoluble	Insoluble	Insoluble
Solubility in organic solvents	Insoluble	Insoluble	Insoluble	Insoluble
Inert in formulation	Yes	Yes	Yes	Yes
Hydrophilic	Yes	Yes	Yes	Yes
Lipophilic	Yes	Yes	Yes	Yes
Usage	Cold or hot process	Cold or hot process	Cold or hot process	Cold process
Implementation in production process	Anytime	Anytime	Anytime	End
Influence on pH-value	No influence	No influence	No influence	No influence
pH-stability	pH 2 - pH 13	pH 2 - pH 13	pH 2 - pH 13	pH 2 - pH 13
Thermostability	Up to 120 °C	Up to 120 °C	Up to 120 °C	Up to 120 °C

☒ highly recommended

VITACEL® CS 5 Apple <input checked="" type="checkbox"/>	VITACEL® CS 5 Oat	VITACEL® CS 7 Orange	VITACEL® CS 8 Green Tea	
Available	Available	Available	Not available	 ECOCERT/COSMOS
Readily	Readily	Readily	Readily	Biodegradable
Yes	Yes	Yes	Yes	Ecofriendly
Apple	Oat	Orange	Matcha	Natural origin
Yes	Yes	Yes	Yes	Safe and edible
Lightly	Lightly	Lightly	Characteristic	Odor
Lightly	Lightly	Lightly	Lightly	Taste
Partly soluble	Insoluble	Insoluble	Insoluble	Solubility in water
Insoluble	Insoluble	Insoluble	Insoluble	Solubility in oil
Insoluble	Insoluble	Insoluble	Insoluble	Solubility in organic solvents
Yes	Yes	Yes	Yes	Inert in formulation
Yes	Yes	Yes	Yes	Hydrophilic
Yes	Yes	Yes	Yes	Lipophilic
Cold process	Cold process	Cold process	Cold process	Usage
Anytime	Anytime	Anytime	Anytime	Implementation in production process
No influence	No influence	No influence	No influence	Influence on pH-value
pH 3 - pH 11	pH 3 - pH 11	pH 3 - pH 11	pH 5 - pH 7	pH-stability
Up to 120 °C	Up to 120 °C	Up to 120 °C	Up to 120 °C	Thermostability



Functions

Increase of smoothness, fluidity and lubricity
Silky soft touch
Absorption
Pleasant skin feel
Mattifying
Opacifying
Anticaking

Suspending
Bulking
Improve the homogeneous distribution of all other ingredients
Prevent reagglomeration of other ingredients
Velvet touch
Powdery feeling

Description

Are you looking for alternatives to silica and synthetic or inorganic powders like polyethylene, polyamide, talc etc. We have the right alternative for you.

VIVAPUR® CS 4 FM, VIVAPUR® CS Sensory 5 and VIVAPUR® CS 9 FM

These products are ultrafine white powders with different particle sizes, properties and skin feel.

The particle size of **VIVAPUR® CS 4 FM** is 4 µm, **VIVAPUR® CS Sensory 5** is 5 µm and **VIVAPUR® CS 9 FM** is 9 µm.

INCI: Microcrystalline Cellulose

VIVAPUR® CS Sensory 15 S

VIVAPUR® CS Sensory 15 S is a composite of Microcrystalline Cellulose and Cellulose Gum. Each particle looks like a pearl with a size of 15µm.

INCI: Microcrystalline Cellulose, Cellulose Gum

Do you like Fruit Fibers?

If yes, please try our selection of apple, oat and orange.

VITACEL® CS 5 Apple

VITACEL® CS 5 Apple is one of the finest fruit fibers with a particle size of 5 µm. The color is brown and it creates a new and unique skin feel.

INCI: Pyrus Malus Fiber

VITACEL® CS 5 Oat

The off-white color of **VITACEL® CS 5 Oat** matches perfect with all kinds of Personal Care products. The particle size is 5 µm with new smooth skin feel.

INCI: Avena Sativa Bran

VITACEL® CS 7 Orange

The beige color of **VITACEL® CS 7 Orange** adapts to any skin color. The particle size is 7 µm with unique skin feel depending on the use level.

INCI: Citrus Aurantium Dulcis Peel Powder

With **VITACEL® CS** Fruit Fibers you get all the advantages of **VIVAPUR®** with additional marketing arguments thanks to the very unique raw material source of apple, oat and orange.

Use Level

2 % to 30 %

Application Guide

Add **VIVAPUR®** and **VITACEL®** at any time into your formulation and mix with low, medium or high shear forces for some minutes until homogenous distributed, depending on viscosity.

Add **VIVAPUR® CS Sensory 15 S** at the end into your formulation and mix with low or medium shear forces for some minutes until homogenous distributed, depending on viscosity.

WINNER PCHi 2017
Fountain AWARD
Category, Green/Sustainable'
VIVAPUR® CS 9 FM



Formulations

Eye Contour Refresh

SKC92.13.03 for **VIVAPUR® CS 4 FM** Anti-Wrinkle Study !

Phase	Ingredient	INCI	Function	%
A	Demineralized Water	Aqua		81.2
	Rheocare™ C Plus	Carbomer	Humectant	0.2
B	Cosmedia® SP	Sodium Polyacrylate	Thickener	0.5
	Eumulgin® Prisma	Disodium Cetearyl Sulfosuccinate	Thickener	0.5
	Cetiol® Sensoft	Propylheptyl Caprylate	Emulsifier O/W	7.0
	Cetiol® RLF	Caprylyl Caprylate/Caprate	Emollient	5.0
	NaOH (a.s. 25%)	Sodium Hydroxyde	Emollient	0.6
	Glycerine (AMI)	Glycerin	pH adjustment	3.0
	Preservative	Preservative	Preservative	Qsp
	VIVAPUR® CS 4 FM or VITACEL® CS 5 Apple or VITACEL® CS 5 Oat or VITACEL® CS 7 Orange	Microcrystalline Cellulose Pyrus Malus Fiber Avena Sativa (Oat) Bran Citrus Aurantium Dulcis (Orange) Peel extract	Smoothing Powder	2.0 2.0 2.0 2.0

Formulated by AMI CHIMIE, France

Process

Mix phase A with stirring until homogenization (600 rpm).
Heat phases A and C at 80 ° C.
Disperse phase B in phase A with stirring (20-30min - 1200rpm).
Make the emulsion, add phase C in A + B with high stirring.
Cool the emulsion.
At 35 ° C, add phase D, then the ingredients of phase E one by one.

Formulations

Illuminating Care Balm – Poured Stick

SKC101.17.86 Dry and powdery melting balm with a soft finish, without synthetic powders

Phase	Ingredient	INCI	Function	%
A	Cutina® HR Powder	Hydrogenated Castor Oil	Consistency factor	4.5
	Lanette® 22	Behenyl Alcohol	Consistency factor	6.5
	Cegesoft® HF 62	Hydrogenated Vegetable Oil	Texture agent	7.5
	Lanette® O OR	Cetearyl Alcohol	Consistency factor	10.5
	Cutina® CP	Cetyl Palmitate	Emollient	15.0
	Cetiol® V	Decyl Oleate	Emollient	20.2
	Cetiol® CC/MB	Dicaprytyl Carbonate	Emollient	20.0
B	VIVAPUR® CS 9 FM	Microcrystalline Cellulose	Softness, Sensory improver	11.0
	Flamenco® Velvet 120 V	Mica & Titanium Dioxide	Illuminator	2.5
C	Covi-Ox® T 90 EU C	Tocopherol	Antioxidant	0.3
	Preservative (Thor PC)	Preservative	Preservative	1.0
	Perfume Soft Pink (Robertet)	Parfum	Perfume	1.0

Formulated by AMI CHIMIE, France

Percentage of NATURAL ORIGIN with formulation water 99.0 %

Process

Melt phase A at 80 - 85 °C with stirring.

Add phase B and mix until complete homogenization.

At 60 °C, add the perfume, preservative and Coviox® an put all together in hot stick form (below 60 °C).

Characteristics

Stick

Hot-poured stick

Main ingredients:

- The consistency factors have been rigorously chosen based on their melting point in order to obtain a hard enough balm, for better stability, while combining an ultra-soft texture during the application.
- Flamenco® Velvet 120 V, interferential pearly on natural mica base and TiO2, is ideal to bring radiance because of particularly light reflector*.
- The **VIVAPUR® CS 9 FM**, a natural and biodegradable touch powder, offers a silky and soft texture without compromise.

*Test VISIA-CR at 2.5 %

Formulations

Smooth Face Cream with VIVAPUR® CS 9 FM and VIVAPUR® CS 4 FM

SKC86.16.42 Cream with a light texture and ultra-soft powdery finish

Phase	Ingredient	INCI	Function	%
A	Demineralized Water	Aqua	Solvent	80.65
	Microcare® NB (Thor PC)	Sodium Benzoate	Preservative	0.5
B	XG FNCSP-PC	Xanthan Gum	Gelifier	0.8
	Glycerine 99.5 % AMI	Glycerin	Humectant	1.0
C	Eumulgin® SG	Sodium Stearoyl Glutamate	Anionic Emulsifier O/W	0.5
	Cutina® HVG	Hydrogenated Vegetable Glycerides	Consistency factor	1.5
	Cetiol® V	Decyl Oleate	Emollient	8.0
D	Cetiol® Ultimate*	Undecane & Tridecane	Emollient	2.0
E	VIVAPUR® CS 9 FM	Microcrystalline Cellulose	Soft powder	2.0
	VIVAPUR® CS 4 FM	Microcrystalline Cellulose	Silky Soft effect, Smoothing effect, Wrinkle filler	2.0
	Perfume Cosmos Hypo Douceur (Robertet)	Parfum	Perfume	0.8
	Citric Acid Solution 50 %	Citric Acid & Aqua	pH adjuster	0.25

Formulated by AMI CHIMIE, France

*This formulation concerns IP rights of L'OREAL. BASF has a license Agreement with L'OREAL. Please contact us for details

Percentage of NATURAL ORIGIN with formulation water 99.5 %

Process

Heat the phases A and C to 75 °C.

Disperse the xanthan gum impaled in glycerin in the aqueous phase with stirring for 20 - 30 min.

Make the emulsion by pouring phase C into phases A + B.

At T < 60 °C, add phase D.

At T < 40 °C, add the **VIVAPUR®** of phase E little by little. Mix well until complete homogenization.

Add the perfume.

Adjust the pH to 5 - 5.5 with a citric acid solution.

Characteristics

pH: 5 – 5.5

Viscosity (Brookfield4, RVT, speed 10): 4 000 - 6 000 mPas

Smooth Face Cream with VIVAPUR® CS Sensory 15 S

SKC86.16.43/SKC86.16.44 Cream with a light texture and ultra-soft powdery

Phase	Ingredient	INCI	Function	%
A	Demineralized Water	Aqua	Solvent	80.65
	Microcare® NB (Thor PC)	Sodium Benzoate	Preservative	0.5
B	XG FNCSP-PC	Xanthan Gum	Gelifier	0.8
	Glycerine 99.5 % AMI	Glycerin	Humectant	1.0
C	Eumulgin® SG	Sodium Stearoyl Glutamate	Anionic Emulsifier O/W	0.5
	Cutina® HVG	Hydrogenated Vegetable Glycerides	Consistency factor	1.5
	Cetiol® V	Decyl Oleate	Emollient	8.0
D	Cetiol® Ultimate*	Undecane & Tridecane	Emollient	2.0
E	VIVAPUR® CS Sensory 15 S or VIVAPUR® CS Sensory 15 S	Microcrystalline Cellulose, Cellulose Gum	Slip effect	4.0
	Perfume Cosmos Hypo Douceur (Robertet)	Parfum	Perfume	0.8
	Citric Acid Solution 50 %	Citric Acid & Aqua	pH adjuster	0.25

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Percentage of NATURAL ORIGIN with formulation water 99.5 %

Process

Heat the phases A and C to 75 °C.

Disperse the xanthan gum impaled in glycerin in the aqueous phase with stirring for 20 - 30 min.

Make the emulsion by pouring phase C into phases A + B.

At T < 60 °C, add phase D.

At T < 40 °C, add the **VIVAPUR®** of phase E little by little. Mix well until completely homogenization.

Add the perfume.

Adjust the pH to 5 - 5.5 with a citric acid solution.

Characteristics of the formula

pH: 5 - 5.5

Viscosity (Brookfield 4, RVT, speed 10): 4 000 - 6 000 mPas



ALTERNATIVE TO
SYNTHETIC POWDERS



SKIN CARE



HAIR CARE



ORAL CARE



SUN CARE



BABY CARE



COLOR

NATURAL & BIODEGRADABLE INGREDIENTS

JRS – Global Manufacturer of Natural Ingredients

Family-owned company

Established in 1878

More than 2500 employees

Headquarters in Germany

Global service and availability

Local support in your language

ISO 9001 certified

Global seminars/trainings

High-Functional Ingredients by JRS

Highest quality and purity

Tailor-made products

Full product regulatory information

Excellent price-performance ratio

Natural

Made from
renewable resources

Eco-friendly

ECOCERT/COSMOS

Skin-friendly



Readily
biodegradable

Safe and edible

Non-GMO

Vegan

Halal & Kosher

J. RETTENMAIER & SÖHNE
GMBH + CO KG



Fibers designed
by Nature

www.jrspersonalcare.com

WORLDWIDE HEADQUARTERS

BU Home & Personal Care
73494 Rosenberg (Germany)
personalcare@jrs.de