

JRS PERSONAL CARE

Family-owned company
Established in 1878
More than 3500 employees
Headquarters in Germany



Global service and availability
Local support in your language
ISO 9001 certified
Global seminars/workshops

J. RETTENMAIER & SÖHNE
GMBH + CO KG



Fibers designed
by Nature

Alternative to synthetic powders

NATURAL



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Motivation



to find the right

natural

safe

and biodegradable alternative to

Global trend

Polymethyl Methacrylate (PMMA)

Silicone powder

silica powder

Polyethylene (PE) powder

Nylon

boron nitride

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JRS high-functionality ingredients

NATURAL



Safe and
edible



Non-GMO

Made from renewable
resources

Eco-
friendly

Natural



COSMOS APPROVED



Skin-
friendly

Readily
biodegradable

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Products for first trials



- VIVAPUR® CS 4 FM
- VIVAPUR® CS 9 FM
- VIVAPUR® CS Sensory 5
- VIVAPUR® CS Sensory 15 S



use level: 2-30%

depending on
formulation

✓ *highly recommended products*

Additional products



- VIVAPUR CS 4 FM
- VIVAPUR CS 9 FM
- VIVAPUR CS Sensory 5
- VIVAPUR CS Sensory 15 S

- **VITACEL CS 5 Apple**
- **VITACEL CS 5 Oat**
- **VITACEL CS 7 Orange**
- **VITACEL CS 8 Green Tea**







use level: 2-30%

depending on
formulation

✓ *highly recommended products*

Products for first trials



VIVAPUR CS	4 FM	9 FM	Sensory 5	Sensory 15 S
natural origin	wood			
INCI	Microcrystalline Cellulose			Microcrystalline Cellulose, Cellulose Gum
color	 white	 white	 white	 white
structure	particles	particles	pearls	pearls
particle size	4 µm	9 µm	5 µm	15 µm
bulk density	150 g/l	190 g/l	190 g/l	550 g/l
functions	mattifying absorption anticaking	mattifying absorption anticaking	increase of smoothness, fluidity and lubricity	increase of smoothness, fluidity and lubricity
alternative to	silica Nylon PE powder	Nylon PE powder	PMMA silicone powder boron nitride	PMMA silicone powder boron nitride

Products for first trials



VIVAPUR CS	4 FM	9 FM	Sensory 5	Sensory 15 S
biodegradable	readily	readily	readily	readily
odor	odorless	odorless	odorless	odorless
taste	tasteless	tasteless	tasteless	tasteless
solubility in water	insoluble	insoluble	insoluble	insoluble
solubility in oil	insoluble	insoluble	insoluble	insoluble
inert in formulation	yes	yes	yes	yes
hydrophilic	yes	yes	yes	yes
lipophilic	yes	yes	yes	yes
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
Usage	Cold/hot process	Cold/hot process	Cold/hot process	Cold process

Additional products






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Additional products



VITACEL CS	5 Apple	5 Oat	7 Orange	8 Green Tea
natural origin	apple	oat	orange	green tea
INCI	Pyrus Malus Fiber	Avena Sativa Bran	Citrus Aurantium Dulcis (Orange) Peel Powder	Camelia Sinensis Leaf Powder
color				
	brownish	off-white	beige	green
structure	particles			
particle size	5 µm	5 µm	7 µm	8 µm
bulk density	180 g/l	140 g/l	200 g/l	200 g/l
functions	Silky soft touch, smoothing agent, sensory enhancer, soft focus			
additional arguments	nice marketing concept			

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Additional products



VITACEL CS	5 Apple	5 Oat	7 Orange	8 Green Tea
biodegradable	readily	readily	readily	readily
odor	lightly	lightly	lightly	characteristic
taste	lightly	lightly	lightly	lightly
solubility in water	partly soluble	insoluble	partly soluble	partly soluble
solubility in oil	insoluble	insoluble	insoluble	insoluble
inert in formulation	yes	yes	yes	yes
hydrophilic	yes	yes	yes	yes
lipophilic	yes	yes	yes	yes
implementation in production process	anytime	anytime	anytime	anytime
influence on pH-value	no influence	no influence	no influence	no influence
pH-stability	pH 3 - pH 11	pH 3 - pH 11	pH 3 - pH 11	pH 3 - pH 11
thermostability	up to 120 °C	up to 120 °C	up to 120 °C	up to 120 °C
Usage	Cold process	Cold process	Cold process	Cold process



Applications

NATURAL



SKIN CARE

- creams
- lotions



COLOR

- BB-creams
- make-up
- foundations
- powders
- lipsticks
- eye shadow



SUN CARE

- sunscreen
- after sun
- creams
- lotions
- sprays



BABY CARE

- baby powder
- creams

Application guide



- can be dispersed with the usual equipment
- add at any time into your formulation
- mix with low, medium or high shear forces
- for some minutes
- depending on viscosity

- exception
please add VIVAPUR CS Sensory 15 S at the end into
your formulation

Formulations



Smooth Face Cream with Sensory 5 -> See FORMULATIONS book page 34

Phase	Ingredient	INCI	Function	%
A	Demineralized Water	Aqua		Qsp
	Microcare® NB (Thor PC)	Sodium Benzoate	Preservative	0.5
B	XG FNCSP-PC	Xanthan Gum	Gelifier	0,8
	Glycerin 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 5	Microcrystalline Cellulose	Smoothing agent	4.0
	Perfume Cosmos Hypo Douceur (Robertet)	Parfum	Perfume	0.8
	Solution d'acide citrique à 50 %	Citric Acid, Aqua	pH adjuster	0.25

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 powders 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 mPa.s

Formulated by AMI CHIMIE, France



Formulations



Smooth Face Cream with Sensory 15 S -> See FORMULATIONS book page 35

Phase	Ingredient	INCI	Function	%
A	Demineralized Water	Aqua		Qsp
	Microcare® NB (Thor PC)	Sodium Benzoate	Preservative	0.5
B	XG FNCSP-PC	Xanthan Gum	Gelifier	0,8
	Glycerin 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	Microcrystalline Cellulose	Smoothing agent	4.0
	Perfume Cosmos Hypo Douceur (Robertet)	Parfum	Perfume	0.8
	Solution d'acide citrique à 50 %	Citric Acid, Aqua	pH adjuster	0.25

Process

Heat the phases A and C to 75 ° C.

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

At T <60 ° C, add phase D.

At T <40 ° C, add the powders 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 mPa.s

Formulated by AMI CHIMIE, France



Formulations



Eyeshadow Blue -> See FORMULATIONS book page 60

Phase	Ingredient	INCI	%
A	Talc	Talc	73.0
	ColoronaR Light Blue	Mica, CI 77891 (Titanium Dioxide), Ferric Ferrocyanide	25.0
	VIVAPUR® CS 4 FM or	Microcrystalline Cellulose	2.0
	VITACEL® CS 5 Apple or	Pyrus malus Fiber	2.0
	VITACEL® CS 5 OAT or	Avena Sativa Bran	2.0
	VITACEL® CS 7 Orange or	Citrus Aurantium Dulcis (Orange) Peel Powder	2.0
	VIVAPUR® CS Sensory 5 or	Microcrystalline Cellulose	2.0
	VIVAPUR® CS Sensory 15 S	Microcrystalline Cellulose, Cellulose Gum	2.0

Results

- Better opacity
- Additional mattifying effect
- Minimizes the appearance of wrinkles
- Creamy and excellent skin feel
- Easier and better distribution of all fillers and pigments on skin

Process:

Add the ingredients one by one with continuous mixing.

Formulated by JRS

Reference product



JRS product in formulation	VIVAPUR CS 4 FM
Use level	Approx 2%
INCI	Microcrystalline Cellulose
function of JRS product	natural wrinkle filler smoothing agent sensory enhancer



Ingredients:

Aqua (Water), Glycerin, PEG-40 Hydrogenated Castor Oil, **Microcrystalline Cellulose**, Caffeine, Magnesium PCA, Argania Spinosa Kernel Extract, Spilanthes Acmella Flower Extract, Undaria Pinnatifida Extract, Polygonum Bistorta Root Extract, Menthyl Lactate, Xylitylglucoside, Xylitol, Glucose, Acrylates/C10-30 Alkyl Acrylate Crosspolymer, Triethanolamine, Phenoxyethanol, Ethylhexylglycerin, Hydroxyacetophenone, Caprylyl Glycol, Hexylene Glycol, Caprylic/Capric Triglyceride, PPG-26-Buteth-26, Anhydroxylitol, Sodium Cocoyl Glutamate, Carbomer, Xanthan Gum.

Reference product



JRS product in formulation	VIVAPUR CS 4 FM
Use level	Approx 2%
INCI	Microcrystalline Cellulose
function of JRS product	natural wrinkle filler smoothing agent sensory enhancer



Ingredients:

Aqua (Water), Glycerin, PEG-40 Hydrogenated Castor Oil, **Microcrystalline Cellulose**, Caffeine, Magnesium PCA, Argania Spinosa Kernel Extract, Spilanthes Acmella Flower Extract, Undaria Pinnatifida Extract, Polygonum Bistorta Root Extract, Menthyl Lactate, Xylitylglucoside, Xylitol, Glucose, Acrylates/C10-30 Alkyl Acrylate Crosspolymer, Triethanolamine, Phenoxyethanol, Ethylhexylglycerin, Hydroxyacetophenone, Caprylyl Glycol, Hexylene Glycol, Caprylic/Capric Triglyceride, PPG-26-Buteth-26, Anhydroxylitol, Sodium Cocoyl Glutamate, Carbomer, Xanthan Gum.

Reference product



JRS product in formulation	VIVAPUR CS 4 FM
Use level	Approx 0,4%
INCI	Microcrystalline Cellulose
function of JRS product	smoothing agent sensory enhancer

Ingredients:



Aqua (Water), Dicaprylyl Carbonate, Isopropyl Myristate, Polyglyceryl-3 Dicitrate/Stearate, Sesamum Indicum (Sesame) Seed Oil, Glycerin, Lecithin, Sorbitol, Xanthan Gum, Sodium Ascorbyl Phosphate, Tocopheryl Acetate, Glyceryl Linoleate, Glyceryl Linolenate, Retinyl Palmitate, Behenyl Alcohol, Spent Grain Wax, Butyrospermum Parkii (Shea) Butter Extract, Argania Spinosa (Argana) Kernel Oil, Cetearyl Alcohol, Hydroxypropyl Starch Phosphate, Caprylic/Capric Triglyceride, Betaine, Xylitylglucoside, Anhydroxylitol, Xylitol, Benzyl Alcohol, Benzoic Acid, Dehydroacetic Acid, **Microcrystalline Cellulose**, Hydrolyzed Corn Protein, Sodium Benzoate, Potassium Sorbate, Allantoin, Triticum Vulgare (Wheat) Germ Oil, BHT, Hippophae Rhamnoides (Sea Buckthorn) Oil, Ceramide 3, Pentylene Glycol, Triticum Vulgare (Wheat) Germ Extract, Parfum (Fragrance), Limonene.

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Packaging variations



- VIVAPUR CS 4 FM
→ 5 & 10 kg bags
- VITACEL CS 5 Apple
- VITACEL CS 5 Oat
- VITACEL CS 7 Orange
- VIVAPUR CS Sensory 5
→ 15 kg bags
- VITACEL CS 8 Green Tea
→ 12,5 kg bags
- VIVAPUR CS Sensory 15 S
→ 20 kg carton