



IMERCARE[®]
Natural. Mineral. Beautiful.

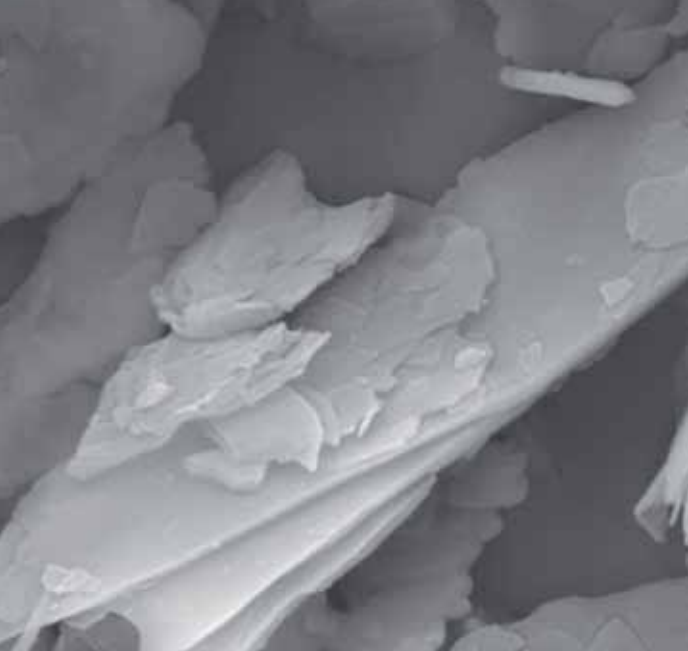
ImerCare[®] Talc range

for multiple cosmetics
applications

- Silky touch and compactibility for pressed powders
- Innovative optical properties for make-up applications
- Texturising agent for emulsions
- Pearlising agent for beauty gels
- Cosmos approved



IMERYS



Imerys offers the widest range of natural talc products to meet the performance and purity requirements of the personal care industry.

ImerCare® talcs provide good sensory properties, such as a silky and soft feel in powders and emulsions and innovative optical properties in powder make-up formulations.

All **ImerCare®** talc grades comply with industry microbiological standards without resorting to irradiation. They are Cosmos approved. This accreditation underscores the naturalness of the talcs produced by Imerys for cosmetics.

ImerCare® talcs for make-up powders



AN UNPARALLELED RANGE OF OPTICAL PROPERTIES

ImerCare® talcs are generally used in make-up powders for their delightfully soft feel. They also offer a wide variety of interesting optical properties.

	ImerCare® 11T	ImerCare® 4T	ImerCare® Dolce	ImerCare® Velluto
Transparency and shine	✓			
Full cover and matte effect		✓	✓ Creamy texture Compactibility	
Innovative optical properties: full cover effect				✓ Full cover effect

For formulations compliant with the US and European pharmacopeia talc monographs, Imerys offers three grades:

	ImerCare® Pharma 00T	ImerCare® Pharma 10T	ImerCare® Pharma 5T
Transparency and shine	✓		
Full cover and matte effect		✓	✓

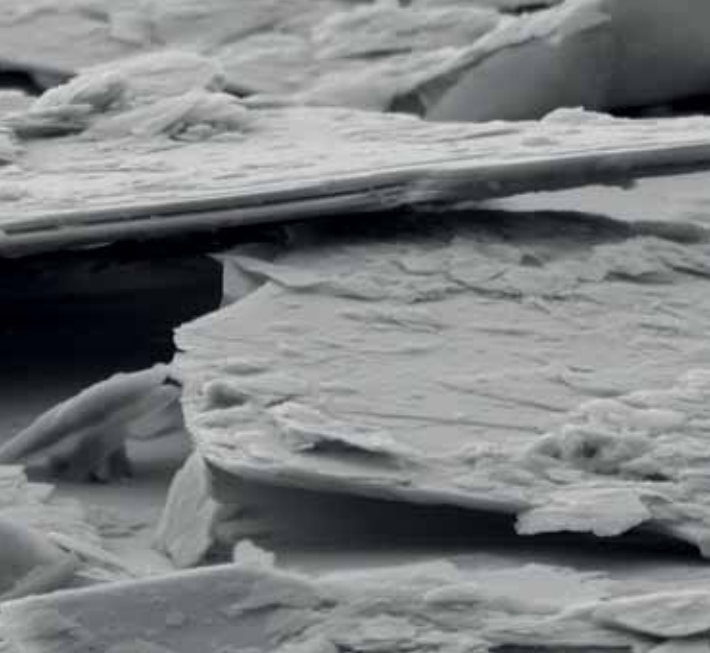


Pressed powder foundation containing 95% talc imparts transparency and shine to skin.



Pressed powder foundation containing 95% talc imparts full cover and matte effect to skin.





IMERCARE® VELLUTO - HIGH-PERFORMANCE TALC WITH INNOVATIVE OPTICAL PROPERTIES AND COMPATIBLE WITH WET PROCESSES

With today's selfie beauty trend, consumers are increasingly looking for products that deliver flawless, "photo-ready" skin. Imerys has developed a new, natural, premium talc: ImerCare® Velluto. This high-performance talc grade has been engineered using patented technology to obtain an innovative structure providing innovative optical property. Thanks to these optical effects, ImerCare® Velluto imparts new light-catching effects to make-up powders, contributing to enhanced skin perfection.

ImerCare® Velluto

for light-catching, high coverage make-up powders

Imercare® Velluto is an ideal base for high cover concealers and foundations with a luminous finish. (cf "Carezza Velluto" formulation, page 4)

Applications

- Powder foundation
- Concealer

■ ImerCare® Velluto is compatible with wet processes

Pressed powders are increasingly prepared using a water slurry pressing methods. The ability of each ingredient to blend with water and dry without cracking are key parameters. Unlike conventional talc grades on the market, ImerCare® Velluto can easily be used in wet processes where it prevents cracking.



Conventional talcs



ImerCare® Velluto

■ Formulations

"Carezza Velluto" mineral foundation formulation

Phase	INCI Name	Ingredients	Function	%
A	Talc	ImerCare® Velluto (Imerys)	Luminous, full cover enhancer	93.0
	Black Iron Oxide (and) Sodium Lauroyl Glutamate (and) Lysine (and) Magnesium Chloride	ASL-1 Black BL-100P (Daito Kasei)	Pigment	0.59
	Red Iron Oxide (and) Sodium Lauroyl Glutamate (and) Lysine (and) Magnesium Chloride	ASL-1 Red R-516P (Daito Kasei)	Pigment	0.91
	Yellow Iron Oxide (and) Sodium Dilaureamidoglutamide (and) Lysine (and) Magnesium Chloride	ASL-1 Yellow LL-100P (Daito Kasei)	Pigment	2.50
B	Isocetyl Stearoyl Stearate	DUB SSIC (Stearinerie Dubois)	Binder	3.0

- Pre-grind pigments.
- Mix ImerCare® Velluto and pigments (phase A) in a low shear blender (speed mixer).
- Pulverise the binder (phase B) onto the powder mix and disperse in a low shear blender until homogenised.



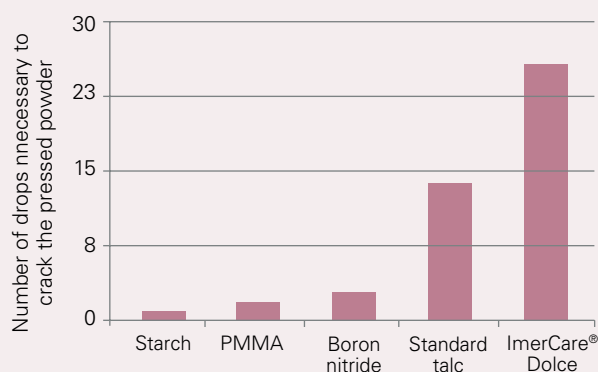
When formulating ImerCare® Velluto, it is important to use a low shear process to blend the ingredients in order to preserve the inherent properties of the product's ultra platy particles.

IMERCARE® DOLCE - A PREMIUM TALC DEVELOPED SPECIFICALLY FOR PRESSED POWDERS

ImerCare® Dolce is a premium talc that imparts unique benefits in pressed powders

- Smooth and creamy: ImerCare® Dolce is the most unctuous talc in the ImerCare® range
- High compactibility: ImerCare® Dolce is the most cohesive talc in the ImerCare® range

■ Drop test results: ImerCare® Dolce improves cohesiveness



Method: for each formulation, three dishes are dropped in an upright position inside a cylinder onto a glass plaque from a distance of 22 cm. This is repeated until the pressed powder formulation cracks and the number of drops is recorded.

■ Formulation "Super Comfort, Ultra Compact" powder used for the drop test

	INCI Name	Commercial name	%
A	Talc	ImerCare® Dolce (Imerys)	95.6
B	Sodium Dehydroacetate	-	0.2
C	Titanium Dioxide	LL-5 TiO2 CR-50 (Daito Kasei)	1.3
	CI 77499	LL-5 BLACK BL-100P (Daito Kasei)	0.2
	CI 77492	LLD-5 YELLOW LL-100P (Daito Kasei)	0.4
	CI 77491	LL-5 RED R-516P (Daito Kasei)	0.4
D	Coco-Caprylate/Caprate	DUB 810 C (Stearinerie Dubois)	2.0

- Weigh phase A.
- Add phase B into phase A and mix with a blender until homogenised.
- Pre-grind phase C pigments with a blender.
- Add phase C and mix the blend for 30 seconds.
- Add phase D drop by drop and mix until homogenised.
- Sift the blend and place 12g into a container.
- Press the powder for 20 seconds at 20 bars.



Soft, fresh feel for body powder applications

With their soft texture and cool, fresh skin feel, ImerCare® talcs are effective anti-chafing agents.

Imerys recommends ImerCare® 11T, the reference for body powder manufacturers. This grade has been optimised in terms of particle size, whiteness and density to obtain the ideal talc for body powder applications.

	ImerCare® 11T
Whiteness Y	91
Median diameter by laser diffraction (µm)	26
Median diameter by sedimentation (µm)	11
Tapped density (g/cm³)	0.85
Loose bulk density (g/cm³)	0.45

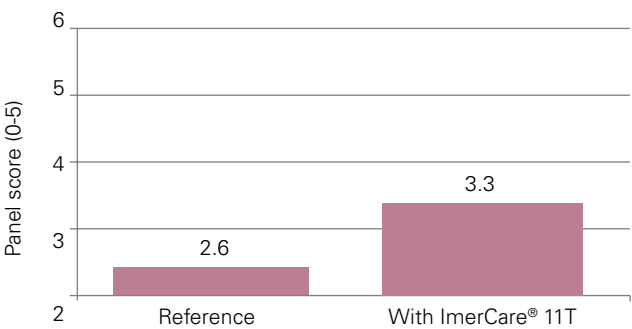


Texturising agent for emulsions

Used in skin care emulsions, ImerCare® talcs confer a smooth, anti-tack feel and pleasant powdery texture. For this application, Imerys recommends ImerCare® 11T.



■ Panel test result: soft, luxurious feel of “Crème de Talc” formulation



The soft, luxurious feel of an emulsion containing 5% ImerCare® 11T is compared to the reference formulation on a scale of 0 to 5 by 8 volunteers.

■ Formulation "Crème de talc" body milk

Phase	INCI Name	Ingredients	Function	%
A	Cetearyl Olivatate (and) Sorbitan Olivatate	Olivem 1000 (Azelis)	Surfactant	4.0
	Butyrospermum Parkii Butter	Karite CP (Sophim)	Emollient	0.6
	Cetearyl Alcohol	Lanette O OR (BASF)	Consistency Agent	0.5
	Isononyl Isononanoate	DUB ININ A (Stearinerie Dubois)	Emollient	8.0
B1	Aqua	-	Solvent	QSP 100
	Disodium EDTA (and) Aqua	EDETA BD (BASF)	Chelating Agent	0.1
	Butylene Glycol	Makilene GC (Daito Kasei)	Humectant	2.0
	Glycerin	-	Humectant	3.0
	Pentylene Glycol	Hydrolite- 5 (Symrise)	Humectant	0.5
B2	Polyacrylate Crosspolymer-6 (and) Aqua (and) t-Butyl Alcohol	Sepimax Zen (Seppic)	Thickener	0.6
	Chlorphenesin (and) Aqua	Chlorphenesin BP 73 (Azelis)	Preservative	0.3
C	1,2-Hexanediol (and) Caprylyl Glycol (and) Tropolone	Symdiol 68 T (Symrise)	Preservative	1.0
	Talc	ImerCare® 11T (Imerys)	Texturising Agent	5.0
	Cyclopentasiloxane	Mirasil CM5 (Bluestar Silicones USA Corp)	Anti-foaming Agent	2.0
	Fragrance (and) BHT (and) Eucalyptol (and) Camphor (and) Tocopherol	VESNA / SA (Accrods & Parfums)	Fragrance	0.3

- Weigh phase A ingredients, stir and heat to 85°C until homogenised.
- Weigh phase B1 ingredients, stir and heat to 60°C until homogenised.
- Sprinkle the Sepimax Zen onto formulation B1 and stir at 60°C.
- Heat to 85°C and sprinkle the Chlorphenesin BP 73 onto B1 formulation.
- When phases A and B are at 85 °C, add phase B to phase A at 1200 RPM until homogenised.
- Cool down to 70°C, stir the mix with an ultra turrax for 30 seconds at 9500 RPM.
- Cool down to 35°C and add phase C ingredients one after another.

Lather agent in bar soap

ImerCare® Steasilk has been specially developed for bar soaps. It confers a creamy texture to the lather and enables production costs to be reduced without affecting performance.



ImerCare® talc range – applications

Final Application		ImerCare® 4T	ImerCare® 11T	ImerCare® Velluto	ImerCare® Dolce	ImerCare® Steasilk	ImerCare® Pharma 00T	ImerCare® Pharma 5T	ImerCare® Pharma 10T
Make-up powder	Transparency and shine		✓				✓ Compliant with USP and EP talc monographs		✓ Compliant with USP and EP talc monographs
	Full cover and matte effect	✓			✓ Creamy texture Compactibility			✓ Compliant with USP and EP talc monographs	
	Innovative optical properties: Full cover and shimmery metallic effect			✓ Full cover					
Body powder			✓						
Emulsions			✓ Soft feel						
Shower gels & shampoo									
Bar soap						✓ Creamy lather			

ImerCare® talc range - characteristics

Commercial name	Whiteness Y	Median diameter by laser diffraction (µm)	Median diameter by sedimentation (µm)	Synthetic sebum absorption (ml/100g)	Specific surface area (m²/g)	Tapped density (g/cm³)	Loose bulk density (g/cm³)	pH at 20% in water	Cosmos approved	Compliant with USP and EP talc monograph	Compliant with micro-biological standards
ImerCare® 11T	91	26	11	50	3	0.85	0.45	9	✓		✓
ImerCare® 4T	94	10	4	70	7	0.50	0.25		✓		✓
ImerCare® Pharma 00T	89	17	10	47	3	0.90	0.45		✓	✓	✓
ImerCare® Pharma 10T	93	19	10	50	4	0.90	0.50		✓	✓	✓
ImerCare® Pharma 5T	93	10	5	70	4	0.60	0.30		✓	✓	✓
ImerCare® Dolce	88	9	4	52	5	0.55	0.25		✓		✓
ImerCare® Velluto	85	11	2	58	20	0.35	0.15		✓		✓
ImerCare® Steasilk	91	14	7	54	5	0.80	0.50		✓		✓

ABOUT IMERYS

The world leader in mineral-based specialties for industry, Imerys delivers high value-added, functional solutions to a diversified set of industrial sectors, from processing industries to consumer goods.

The Group draws on its knowledge of applications, technological expertise and its material science know-how to deliver solutions based on the beneficiation of its mineral resources, synthetic minerals, and formulations. These contribute essential properties to customers' products and performance, including refractoriness, hardness, conductivity, opacity, durability, purity, lightness, filtration, absorption and repellency.

Imerys is determined to develop responsibly, in particular by fostering the emergence of environmentally friendly products and processes.

OUR EXPERTISE

With over two hundred years' experience in the minerals business, Imerys refines and engineers its minerals through various—often proprietary—processes that influence their concentration, size, shape, structure and surface chemistry to obtain the properties our customers require and to the highest standards of quality, consistency and reliability.

Our Personal Care team has in-depth knowledge of how minerals interact in cosmetic applications and a proven track record for developing new, value-added solutions for customers.

Our applications laboratories are equipped with a full range of analytical and cosmetics-specific equipment, enabling us to provide customers with bespoke formulation services and technical support.

ABOUT IMERCARE®

ImerCare® minerals benefit from all the experience and expertise of Imerys group.

The ImerCare® product range is derived from 100% natural kaolin, perlite, diatomaceous earth and talc grades which have been engineered to provide exactly the right properties in terms of exfoliation, matting, transparency, coverage, rheology absorption, and skin feel.

ImerCare® minerals are ideal for use in skin care, make-up, toiletries, hair care and oral care.

All ImerCare® grades are natural, chemically inert and can be used in bio cosmetics. They are processed so as to provide specific functional benefits in cosmetic formulations.

INTEGRATING SUSTAINABLE DEVELOPMENT INTO ALL WE DO

As the world's leading supplier of mineral-based specialty solutions, we have a duty to extract and transform minerals responsibly and sustainably over the long term to meet society's needs.

Our ambition is simple: we want to unlock the sustainable potential of minerals.

We are already on a journey to achieve our ambition, with clear measurable objectives, through what we call SustainAgility.

- In our business, we are scaling up our efforts to deliver new solutions and opportunities to extend the life cycle of our minerals.
- Within our communities, we are determined to play a positive role, both for local ecosystems and economies over the long-term.
- In the global drive to combat climate change, we are committed to act by reducing carbon emissions in our operations by 36% relative to revenue by 2030.

SustainAgility goes to the heart of who we are and what we are as a business, now and long into the future.



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