



# IMERCARE®

Natural. Mineral. Beautiful.

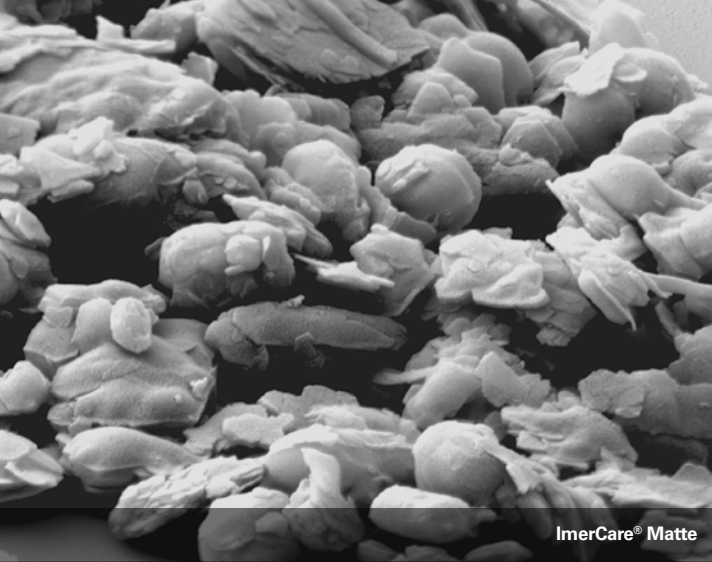
## ImerCare® Matte

A new, natural, kaolin-based  
solution for skin care  
and make-up applications

- Mattifying effect
- Natural, eco-friendly
- Plastic microbeads alternative



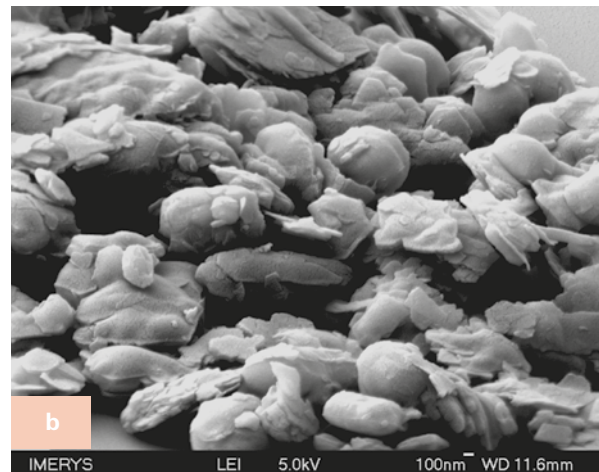
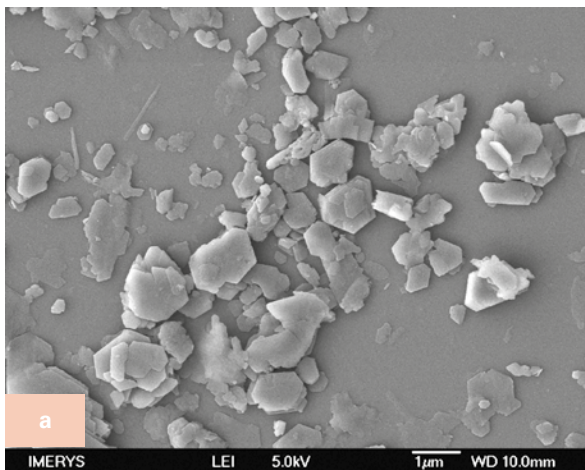
IMERYS



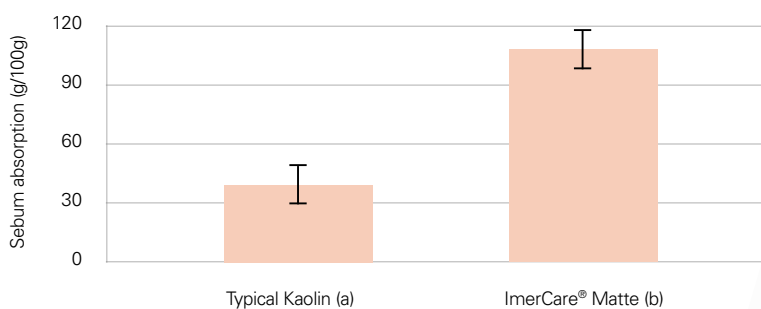
**ImerCare® Matte** is a naturally white kaolin-based solution that provides a superior mattifying effect in gels and creams, liquid foundations and pressed powders. Due to its unique morphology, ImerCare® Matte absorbs sebum and confers an immediate matte effect to the skin.

## ImerCare® Matte for superior mattifying performance

Compared to conventional kaolin (a), ImerCare® Matte (b) has been especially processed to obtain an innovative, microporous structure. This structure possesses a high surface area, providing excellent sebum absorption and a natural matte skin finish.



**ImerCare® Matte demonstrates superior sebum absorption versus conventional kaolin**



The sebum absorption measurements were carried out with synthetic sebum, a blend of triglycerides and fatty acids (details of composition can be provided upon request). Sebum absorption is measured according to standard ISO 787-5:1980.



# ImerCare® Matte effectiveness in pressed powders validated by a panel test

## ■ Formulation guidelines for pressed powders in make-up applications

### "Infinitely matte" pressed powder

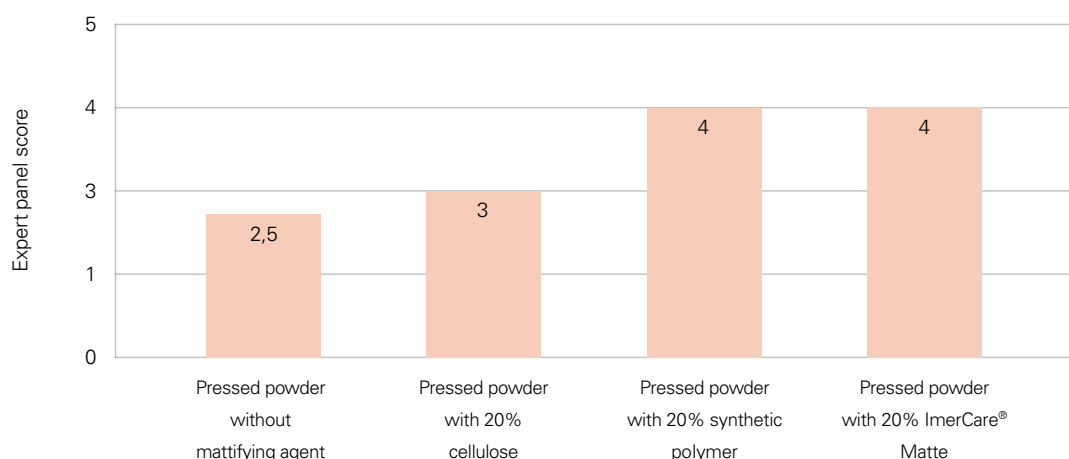
Phase	INCI name	Commercial name	Function	%
A	Talc	ImerCare® Pharma 5T (Imerys)	Compacting and sensory agent	72.6
	Sodium dehydroacetate	-	Preservative	0.2
	Titanium dioxide (and) aluminium hydroxide (and) lauroyl lysine	LL-5 TiO2 CR-50 (Daito Kasei)	Pigment	1.3
	Black iron oxide (and) lauroyl lysine	LL-5 Black BL-100P (Daito Kasei)	Pigment	0.2
	Yellow iron oxide (and) lauroyl lysine	LL-5 Yellow LL-100P (Daito Kasei)	Pigment	0.4
	Red iron oxide (and) lauroyl lysine	LL-5 Red E-516P (Daito Kasei)	Pigment	0.3
B	Coco caprylate/ caprate	DUB 810C (Stearinerie Dubois)	Binder	5.0
C	Kaolin	ImerCare® Matte (Imerys)	Mattifying agent	20.0

### Procedure

- Weigh phase A ingredients and mix them using a spatula until homogenised.
- Take a fraction of the mixture and mix it for 30 seconds with the mixer.
- Repeat this action until the mix is fully blended.
- Put the powder blend into a beaker.
- Add phase B drop by drop.
- Homogenise with the spatula.
- Add ImerCare® Matte into the beaker and homogenise.
- Mix the blend for 30 seconds.
- Sift the blend.
- Weigh 12g into each container.
- Press the powder for 20 seconds at 20 bars.

## ■ Panel test results

### Mattifying effect of a pressed powder formulation



The mattifying performance of a pressed powder containing 20% ImerCare® Matte was compared on a scale of 0 to 5 to two benchmarks containing respectively 20% synthetic polymer and 20% cellulose by five experts from Effervescence Lab laboratory.

## Conclusion

The pressed powder containing ImerCare® Matte demonstrates a high mattifying effect comparable to the benchmarks.

## ImerCare® Matte effectiveness in cream gels validated by a clinical study

The performance of a mattifying gel containing 5% ImerCare® Matte was compared to a benchmark containing 5% synthetic mattifying agent based on a synthetic polymer and a placebo without mattifying agent. The test was conducted by DermScan laboratory on 17 volunteers with mixed to oily skin.

### ■ Formulation guidelines for cream gels in skin care applications

#### "Bounce-back" matte cream gel

Phase	INCI name	Commercial name	Function	%	Placebo
A	Aqua	-	Solvent	QSP 100	QSP100
	Chlorphenesin	Elestab® CPN (BASF)	Preservative	0.2	0.2
B	Sodium acrylates copolymer (and) lecithin	Lecigel™ (Lucas Mayer)	Gelling agent	1.8	1.8
C	Phytic acid (and) aqua	Dermofeel® PA (Evonik)	Chelating agent	0.1	0.1
	Coco caprylate/ caprate	DUB 810 C (Stearinerie Dubois)	Emollient	3.0	3.0
	Glycerin	-	Humectant	1.0	1.0
	Tocopherol	Covi-Ox® T90 EU C (BASF)	Antioxidant	0.1	0.1
D	Glyceryl caprylate	Dermosoft® GMCY (Evonik)	Wetting agent	0.5	0.5
E	Kaolin	ImerCare® Matte (Imerys)	Mattifying agent	5.0	0

#### Procedure

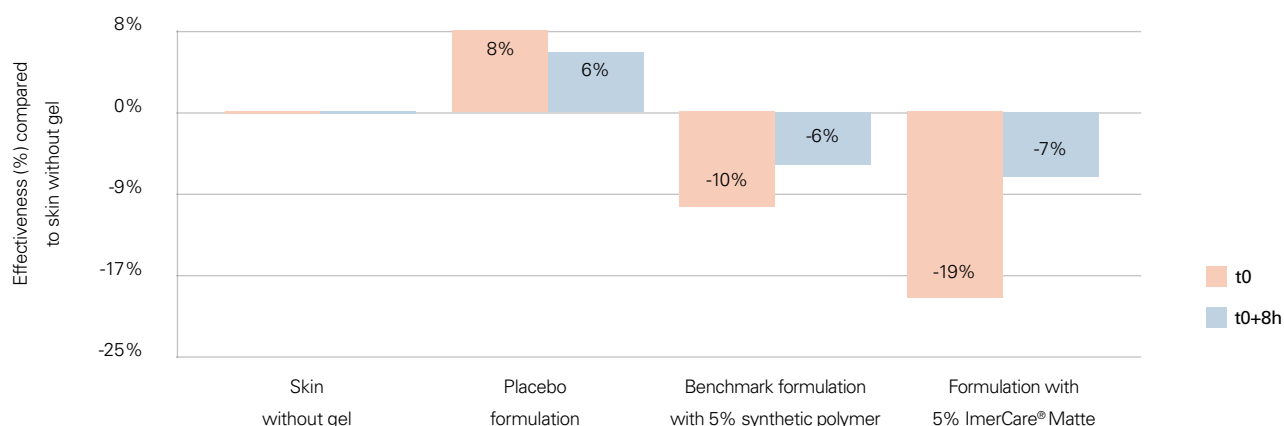
- Weigh phase A ingredients and heat Elastab CPN until it melts.
- Sprinkle phase B into phase A and stir to obtain a consistent gel.
- Add phase C ingredients one after another.
- Heat phase D gently until it melts before adding it to the mixture.
- Finally, add ImerCare® Matte.

#### Characteristics

- Appearance: white
- pH: 6.5
- Viscosity: 433 100 cP (Brookfield, Spindle 96, Helipath 3, 3 rpm, 20°C)
- Stability: 3 months at 4°C, 20°C and 50°C

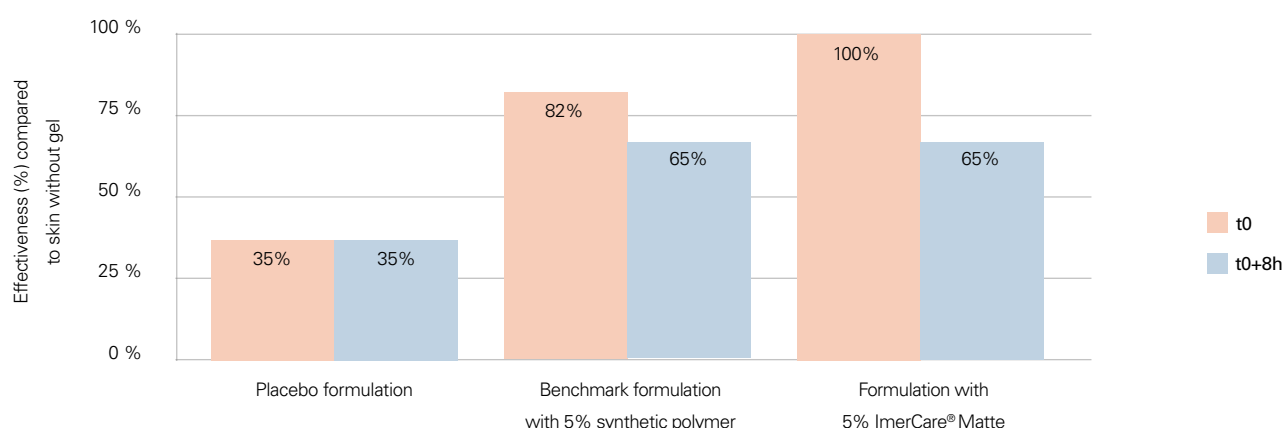
### ■ Clinical study results

#### Variation of skin gloss compared to reference (skin without mattifying gel)





### Volunteers whose skin exhibits a mattifying effect



The three mattifying gels were applied to the 17 volunteers' hemi-foreheads according to a standardised application method (2 µl/cm²) at the DermScan laboratory. The mattifying effect at t0 and t0+8h was evaluated using cutaneous gloss measurements with the Glossymeter® GL 200.

## Conclusion

The mattifying gel containing ImerCare® Matte demonstrates:

- a visible effect on 100% of the volunteers
- a superior immediate mattifying effect compared to the benchmark
- an equivalent mattifying effect after 8 hours compared to the benchmark

## ImerCare® Matte has a transparent material life cycle

Imerys is not only committed to managing the environmental and social impact of its operations, but to finding innovative solutions that promote a low-carbon and circular economy, and which support customers in their own transition.

### ■ Product Life Cycle Assessment to meet customer requirements

To this effect, Imerys has conducted numerous LCA analyses of products in the Group portfolio to determine their environmental footprint. These studies serve a dual purpose: they provide customers with fully comprehensive, transparent information about a product and give more visibility on the impact of specific products or facilities—a prerequisite to any eco-design approach. The results of the Life Cycle Assessment of ImerCare® Matte, calculated according to ISO 14040 and 14044 standards, are available upon request.

The recent in-depth study conducted according to **Bilan Carbone® methodology** is an example of an initiative launched in 2019 to gain better understanding of key CO<sub>2</sub> emissions sources from mining operations, manufacturing and supply chain. Priorities have been defined in terms of actions and investments to improve energy efficiency and reduce all sources of CO<sub>2</sub>.

### IMERCARE® MATTE: A SUSTAINABLE SOLUTION

- **Plastic-free mattifying agent**, contributing to less microplastics in water- and food- chain
- Has **7 times lower carbon footprint versus** the most commonly used mattifying agent PMMA
- Helps **reducing formulations' total carbon footprint by 20-60%** (liquid foundation and cream respectively)
- One of the **lowest impactful ingredients** after water in terms of environmental footprint of the whole formulation.
- Our recently introduced **Pioneer certificate** denotes a product that provides **the highest social and environmental contribution to the downstream value chain**, while demonstrating a **low environmental impact** in its production phase compared to its economic value.





## About Imerys

The world leader in mineral-based specialty solutions 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 beneficiation of its mineral resources, synthetic minerals and formulations. These contribute essential properties to customers' products and performance. 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



At Imerys, we respect the world in which we operate. We are committed to our role in society, to meeting our obligations to the countries and communities in which we do business, as well as to acting as responsible environmental stewards.

Our Corporate Social Responsibility policy is built upon three mainstays:

## Empowering our people

- **Ensuring that health and safety come first** by developing and continually improving our health and safety culture and systems so as to achieve an injury-free workplace.

- **Developing our human capital** by respecting internationally recognized human rights and labor practices as set out in our Code of Business Conduct and Ethics; investing in the talent and skills of our employees; engaging in constructive social dialogue, and fostering a culture of workplace diversity and inclusion based on mutual respect.

## Caring for our planet

- **Acting as responsible environmental stewards** by assessing environmental risks and continually improving control measures to reduce adverse environmental impacts; maximizing the efficient use of natural resources, and preserving biodiversity.

- **Reducing the impact of climate change** through the implementation of a long-term climate change strategy in line with the COP21 2°C trajectory as well as developing innovative solutions at the service of a low-carbon economy.

## Building for the future

- **Ensuring exemplary Business Conduct** by maintaining the highest standard of corporate governance; respecting and implementing fair operating practices and ensuring a responsible supply-chain with all our partners; and engaging with local communities to create shared value in particular through education and skills development.

- **Ensuring that our products are safe** for people and the environment and developing sustainable solutions that make positive contributions to society from both life cycle assessment as well as long term sustainability perspectives.



More information about our sustainable development policies and practices can be found on:

[www.imerys.com](http://www.imerys.com)



## Compliance

All Imerys cosmetic products are natural and chemically inert. These attributes enable them to be used in cosmetic products that comply with European cosmetic directive (EC) n°1223/2009.

## Cosmos

ImerCare® Matte complies with industry microbiological standards without resorting to irradiation. It is not treated with chemicals during processing. It is Cosmos approved. This accreditation underscores the naturalness of the minerals selected and produced by Imerys for the cosmetics industry.



**COSMOS  
APPROVED**



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