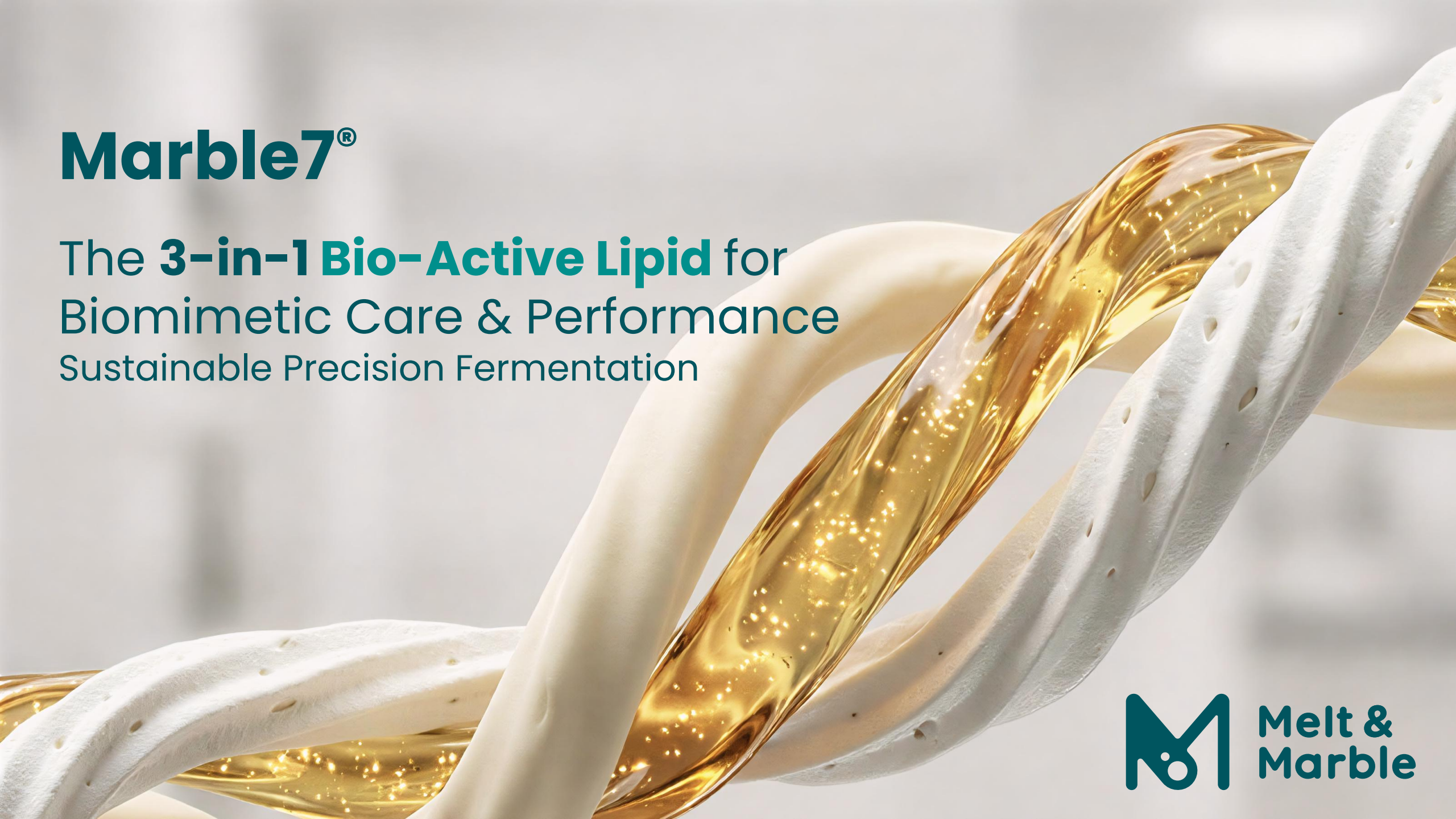
Marble7®

The **3-in-1 Bio-Active Lipid** for Biomimetic Care & Performance

Sustainable Precision Fermentation



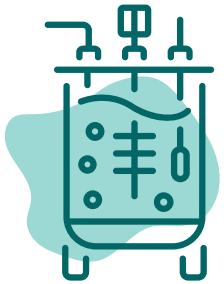
Melt & Marble

Melt&Marble brings a New Generation of Bio-Active Lipids through Precision Fermentation

Our technology allows **sustainable production** of **any tailor-designed lipid**, **anywhere in the world**, and from **a variety of sustainable feedstocks**.



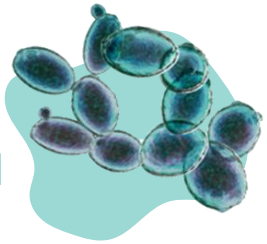
Feedstocks



Fermentation Process



Functional Bio-Active Lipids



Yeast cells, tailor-designed

Plant-based & Upcycled Feedstocks*

Local Production with Low Climate Impact

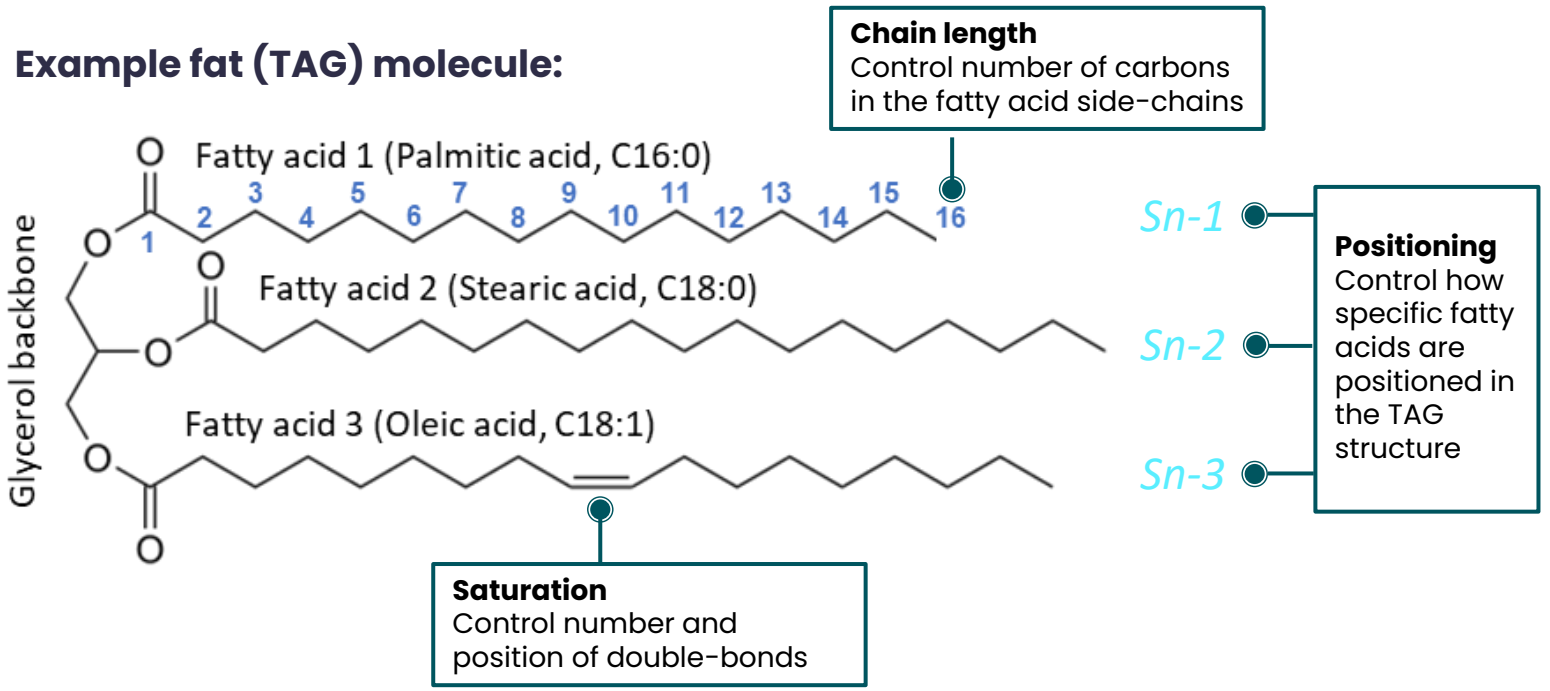
No Deforestation

* Our fermentation process is compatible with a variety of feedstocks, with validation currently underway for upcycled sources

Our Lipid-Design Technology

Fats and oils consist of multiple **T**ri-**A**cyl-**G**lycerol (**TAG**) molecules which are composed of three fatty acids positioned at a glycerol backbone.
We rewire the lipid metabolism of our yeast to allow it to produce fats with **desired chain length, saturation and positioning**, thereby controlling the resulting properties of these fats.
This allows us to mimic different animal & plant fats, and tailor make fats for different applications.

Example fat (TAG) molecule:



Design parameters for fats

Chain length

Saturation

Assembly onto fat structure

Resulting properties

Functional profile

Sensory profile

Efficacy benefits

Bio-Active Lipids by Melt & Marble

Next-Gen Bio-Designed Lipids for Superior Skin & Hair Formulations

Sustainable & Ethical
Ethically produced, cruelty-free lipids for lower environmental impact.

High Performance Formulation
Multi-functional technology providing superior structure, stability and rheology.

Powerful Bioactivity
Engineered to mimic skin sebum enriched with bio active fatty acids for biomimetic care.

Sensory Consumers Will Love
Nourishing yet elegant and smooth feeling during and after application.

Clean Label Efficiency
Simplifies formulations by replacing multiple ingredients , reducing costs, waste, and process complexity.

Introducing our first product: Marble7®

A 3-in-1 Bio-Active Lipid, designed to synergistically fuse **three distinct benefits:**

Engineered to Care

- **Bioactive lipid rich in Omega-7** that mirrors the fatty acid signature of the skin's own sebum, delivering biomimetic care for skin.
- Clinically shown to **support skin barrier recovery and hydration**, under dermatologist supervision.

Structured to Perform

- A **multifunctional** emollient, with a **formulation proven framework** that adds structure, stability and luminous glow.
- Excellent texturizer & thickener
- Increases viscosity of oils in solid products, decreasing the levels of required structuring agents
- Reduces oil syneresis in solid products
- Co-emulsifying and self-emulsifying properties
- Great pigment stabilizer

Designed to Melt

- Provides Unique **Sensorial and luxurious Texture experience.**
- It Melts at skin temperature to mimic natural sebum, providing a solid-to-silk texture transformation and silicone-like glide.
- Immediately improves skin smoothness while delivering sensory performance comparable to dimethicone.



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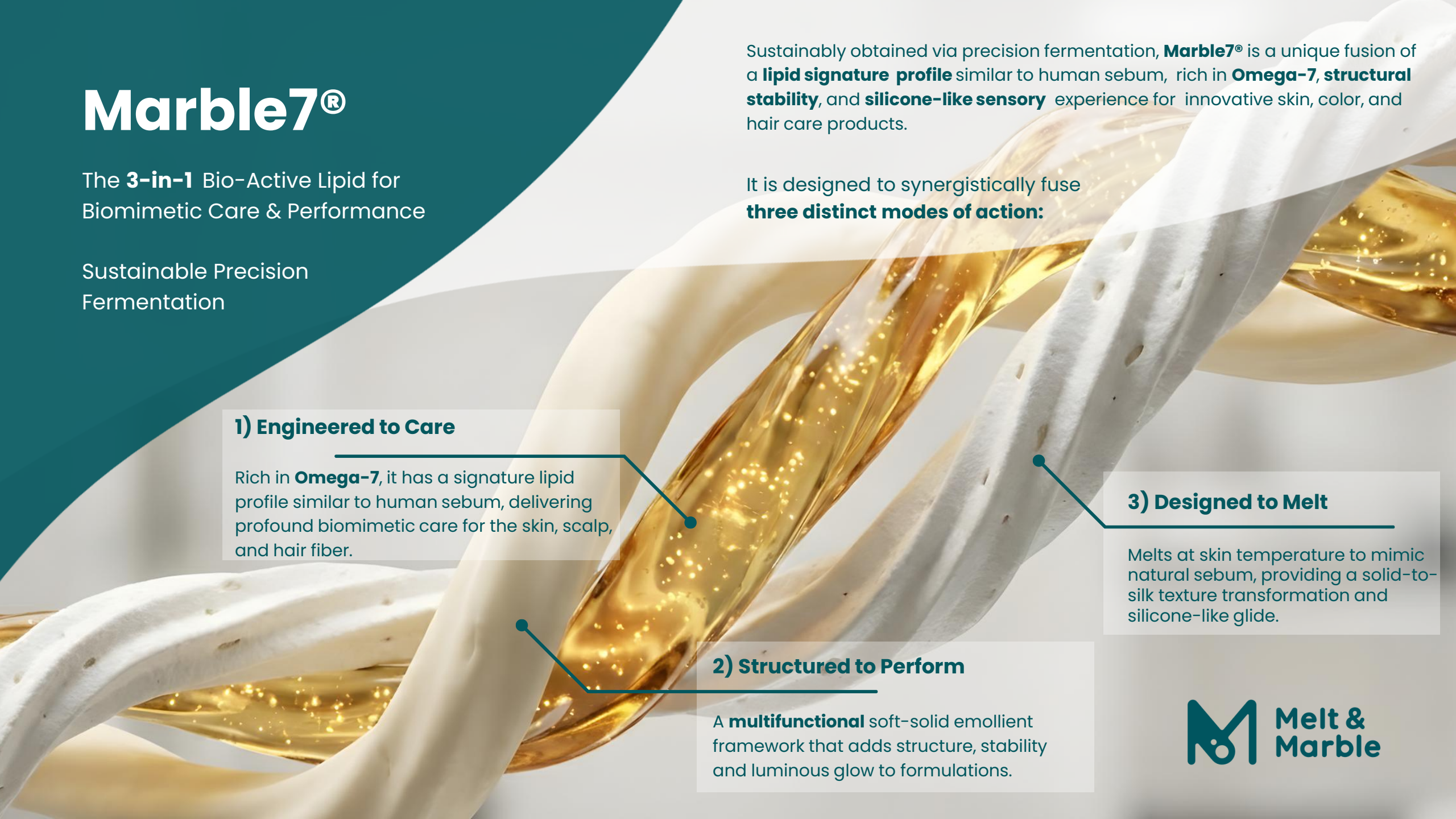
Marble7®

The **3-in-1** Bio-Active Lipid for Biomimetic Care & Performance

Sustainable Precision Fermentation

Sustainably obtained via precision fermentation, **Marble7®** is a unique fusion of a **lipid signature profile** similar to human sebum, rich in **Omega-7**, **structural stability**, and **silicone-like sensory** experience for innovative skin, color, and hair care products.

It is designed to synergistically fuse **three distinct modes of action:**



1) Engineered to Care

Rich in **Omega-7**, it has a signature lipid profile similar to human sebum, delivering profound biomimetic care for the skin, scalp, and hair fiber.

2) Structured to Perform

A **multifunctional** soft-solid emollient framework that adds structure, stability and luminous glow to formulations.

3) Designed to Melt

Melts at skin temperature to mimic natural sebum, providing a solid-to-silk texture transformation and silicone-like glide.

Melt & Marble

Introducing our first product: Marble7®

A Bio-Active Lipid for Skin & Hair Care

For Biomimetic Care & Performance

Stabilized with Rosemary Extract as antioxidant

PRODUCT SPECIFICATION	
Name of product	Marble7® (Baker's Yeast Butter)
Contains	Baker's Yeast Butter (>99%), Rosemary Extract (0.3%)
INCI	r-Saccharomyces Butter, Helianthus Annuus (Sunflower) Seed Oil, Rosmarinus Officinalis (Rosemary) Leaf Extract
Product description	Marble7™ is a precision fermentation-derived 3-in-1 lipid that biomimics skin sebum. Rich in Omega-7, this emollient adds structure, stability, and a silicone-like glide that melts into skin for transformational textures.

SENSORY & PHYSICAL CHARACTERISTICS	
Appearance	Semi-Solid at room temperature
Color	Off-white / Yellow
Flavor and smell	Neutral, possible slight rosemary odor
Melting point	35-40 °C (complete melt)



Marble7® :Formulation Guidelines

A multi-functional ingredient

- Rich emollient with luxurious texture
- Unique sensorial experience
- Texturizer & thickener with co-emulsifying properties

Ideal for anhydrous products and emulsions:

- Versatile in **emulsions**
- **Solid formulations** for skincare & haircare
- Multifunctional **colour cosmetics**

Usage rate

- Clear anhydrous formulas in a liquid format: ≤5%
- Emulsions: ≤10%
- Anhydrous formulas in a solid format (hot pour): ≤ 70%

Tips

- Complete melt achieved at ≥40°C
- Added to the oil phase, preferably at the end of the melt, or after homogenizat at ~40°C
- To fully erase the crystal memory, heat Marble7 to 60°C and let it equilibrate fo least 15 min.
- If working with whipped Marble7, the fat can be melted down and re-processe
- For anhydrous products in a solid format, faster crystallization rate will create smaller crystals, creating better texture – crucial for product's containing highe levels of Marble7 (>30%)



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