


# Chemyunion presents a Peptid4® Light MB

**CHEMYUNION INC**

**www.chemyunion.com**

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## PRODUCT/SERVICE BACKGROUND INFORMATION

Every day at Chemyunion we create and develop sustainable and innovative ingredients, aligned with market trends, for the personal care, health and home care sectors. Our advanced capabilities in delivery systems, organic synthesis, peptides and plant extraction provide maximum efficacy and safety to each ingredient, while adding perceived value to our clients' formulas, and their consumers, through relevant brands around the world. Through the adoption of sustainable processes such as Supercritical CO2 and Biotechnology, Chemyunion follows the precepts of green chemistry that are globally recognized under the principles of Sustainability. Discover how easy it is to innovate with Chemyunion.

## WHAT IS THE COMPANY INTRODUCING TO THE MARKET/INDUSTRY?.

Chemyunion presents a **Peptid4® Light MB**, a synthetic tetrapeptide that acts as an MC1R antagonist, blocking the α-MSH signal before melanin synthesis begins. In vitro it reduced TYR (-62%), TYRP-1 (-42%), DCT (-45%), RAB27A (-71%) and the inflammatory mediator Endothelin-1 (-62%). Ex vivo, it cut melanin by 66% and boosted collagen I by 63%. A 12-week placebo-controlled clinical study in phototypes IV-V confirmed spot reduction, glow from day 28 and lower erythema, even in sensitive skin. Used at 2%, water-soluble and stable at pH 2-8, it is made via a PFAS-free solid-phase synthesis meeting 10 of 12 Green Chemistry principles.

## HOW WILL THIS NEW PRODUCT/SERVICE IMPACT THE INDUSTRY (BENEFITS)?

Peptid4® Light MB shifts the tone-evening market from aggressive bleaching to intelligent cell signaling modulation. By acting upstream on MC1R and on the inflammation-pigmentation cycle, it delivers visible results without irritation, enabling brands to safely address sensitive skin and higher phototypes, often underserved by classic actives. Its multifunctional profile (even tone, glow, calming and firming) simplifies formulas and supports strong, science-backed claims. With 99.86% natural origin content (ISO 16128) and a PFAS-free, greener process, it combines high performance, dermatological safety and sustainability in a single ingredient.