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TECHNICAL DATA SHEET

Palmitoyl Dipeptide-52 Powder • BLP-PD52-260918-P

1. PRODUCT IDENTITY

INCI: Palmitoyl Dipeptide-52

CAS: 63721-19-7

Sequence: Pal-Pro-Pro

Molecular weight: 450.65 g/mol

Type: palmitoyl lipopeptide

Form: Pure white to off-white powder

2. FUNCTION

Palmitoyl Dipeptide-52 is a simple lipopeptide (Pal-Pro-Pro) used in hair and scalp care products. It is used in cosmetic products targeting the appearance of grey strands. Additional antioxidant character. Also used for general skin conditioning.

3. TYPICAL SPECIFICATIONS

Parameter	Specification
Appearance	White to off-white powder
Assay (HPLC)	≥ 98.0 %
Peptide content	≥ 80.0 %
Water (KF)	≤ 5.0 %
Identity	Conforms by HPLC/MS

4. FORMULATION GUIDANCE

Recommended use level (pure powder): 0.001-0.05% (10-500 ppm) in finished product.

Solubility: Lipophilic. Pre-disperse with Polysorbate 20 or similar solubilizer. Add to oil phase or pre-solubilized into aqueous phase below 40 °C.

pH range: Stable 4.5-7.5. Avoid strong acids/bases and prolonged heat.

Compatibility: Compatible with most cosmetic bases. Avoid strong oxidizers.

5. STORAGE & SHELF LIFE

Store sealed, dry, 2-8 °C, protected from light and moisture. Shelf life 24 months from manufacture date when stored as recommended. Lot BLP-PD52-260918-P manufactured 18 September 2026, expires 18 September 2028.

6. REGULATORY

Cosmetic raw material only. Not a drug. Not for ingestion or injection. Complies with internal specification BLP-SPEC-PD52-98.