

TECHNICAL DATA SHEET

IO Hair Peptide Complex Solution • IO-CPX-260815-100

1. PRODUCT IDENTITY

INCI: Butylene Glycol (and) Water (Aqua) (and) Dextran (and) Acetyl Tetrapeptide-3 (and) Trifolium Pratense (Clover) Flower Extract
CAS: Mixture; Acetyl Tetrapeptide-3 827306-88-7; Trifolium Pratense Flower Extract 85085-25-2; Dextran 9004-54-0; Butylene Glycol 107-88-0
Form: Clear to slightly yellowish liquid, water-soluble
Batch size: 100 kg
Country of Origin: United States

2. FUNCTION

Synergistic complex of a biomimetic signal peptide (Acetyl Tetrapeptide-3) and red clover flower extract rich in biochanin A. Used in scalp, hair, eyelash and eyebrow formulations for density, strengthening and conditioning positioning.

3. SPECIFICATIONS

Parameter	Specification
Appearance	Clear to slightly yellowish liquid
pH (as is)	4.0 – 8.0
Solubility	Freely water-soluble
Peptide identity	Acetyl Tetrapeptide-3 confirmed
Extract identity	Trifolium Pratense markers confirmed
Microbiology	TAMC < 100 CFU/g; TYMC < 10 CFU/g; pathogens absent

4. FORMULATION GUIDANCE

Recommended use level: 0.5–2.5% preventive; 2.5–5.0% intensive treatment.
Incorporation: Add during cool-down, preferably below 40 °C. Water-soluble.
pH range of finished formula: 4–8.
Applications: Scalp serums, tonics, leave-on and rinse-off hair products, eyelash and eyebrow treatments.

5. STORAGE & SHELF LIFE

Store tightly closed, cool, dry, protected from light and moisture, 15–25 °C. Shelf life 24 months from manufacture when stored as recommended. Lot IO-CPX-260815-100 (batch size 100 kg) manufactured August 2026, expires August 2028.

6. REGULATORY

Cosmetic raw material only. Not a drug. Not for ingestion or injection. Complies with internal IngredientOS specification.