

CERTIFICATE OF ANALYSIS

Product Name	IO Hair Peptide Complex Solution	Lot / Batch No.	IO-CPX-260815-100
INCI Name	Butylene Glycol, Water (Aqua), Dextran, Acetyl Tetrapeptide-3, Trifolium Pratense (Clover) Flower Extract	Date of Manufacture	August 2026
CAS	Mixture (827306-88-7 peptide)	Expiration Date	August 2028
Form	Clear to slightly yellowish liquid	Date of Analysis	21 August 2026
Batch size	100 kg	Country of Origin	United States
Solubility	Water-soluble	Storage	Cool, dry, sealed, protect from light

ANALYTICAL RESULTS

Test Parameter	Specification	Result	Method	Status
Appearance	Clear to slightly yellowish liquid	Complies	Visual	PASS
Odor	Characteristic, mild	Complies	Organoleptic	PASS
pH (as is)	4.0 – 8.0	5.6	Potentiometric	PASS
Solubility in water	Freely soluble	Complies	Visual	PASS
Peptide identity	Acetyl Tetrapeptide-3 present	Confirmed	HPLC	PASS
Extract identity	Trifolium Pratense markers	Confirmed	HPLC / TLC	PASS
Specific gravity	0.98 – 1.05	1.02	USP	PASS
Total aerobic count	< 100 CFU/g	< 10 CFU/g	USP <61>	PASS
Yeasts and molds	< 10 CFU/g	< 10 CFU/g	USP <61>	PASS
Pathogens	Absent / g	Absent	USP <62>	PASS
Heavy metals (as Pb)	≤ 10 ppm	< 5 ppm	ICP-MS	PASS

USE & HANDLING

Product: Water-soluble liquid complex of Acetyl Tetrapeptide-3 and Trifolium Pratense (Clover) Flower Extract in a butylene glycol / water / dextran base. Designed for scalp, hair and eyelash formulations.

How to use: Add during the cool-down phase, below 40 °C. Recommended use level: 0.5–2.5% for preventive care; 2.5–5.0% for intensive treatment. Water-soluble.

Release: Lot IO-CPX-260815-100 (batch size 100 kg) complies with internal specification. Cosmetic use only. Not for ingestion or injection.

Approved by:	Quality Control	Authorized Signature:	
Title:	QC, IngredientOS	Date:	21 August 2026