

TINTBEAUTY · COSMETIC ACTIVE

● AVAILABLE

Velura

sulfated EPS

High-molecular-weight sulfated exopolysaccharide from *Porphyridium cruentum*. HA-like plumping and barrier support, off the hyaluronic-acid supply curve. Supplied as a stabilized aqueous solution and a powder concentrate.

01 · IDENTIFICATION & COMPOSITION

INCI	Porphyridium Cruentum Extract	ACTIVE EPS	1.2% w/w · 12,000 ppm
SOURCE	<i>Porphyridium cruentum</i>	MOLECULAR WEIGHT	~1,291 kDa · SEC-MALS
ORIGIN	Spain · closed photobioreactor	POLYSACCHARIDE	Sulfated exopolysaccharide
PRODUCT CODE	TB-02 · liquid (TB-02P powder)	FUNCTION	Humectant, skin conditioning
PROCESS	PBR cultivation, EPS recovery, stabilization	FORMATS	Liquid & powder (TB-02P)
CARRIER	Water, glycerin, preservative		

02 · PHYSICAL, CHEMICAL & SAFETY

APPEARANCE	Pale amber solution	LEAD (PB)	0.50 mg/kg max · ICP-MS
ODOR	Mild · characteristic	ARSENIC (AS)	0.50 mg/kg max · ICP-MS
PH (NEAT)	5.5 to 7.0	CADMIUM (CD)	0.50 mg/kg max · ICP-MS
ACTIVE MATTER	1.2% EPS · gravimetric	MERCURY (HG)	0.025 mg/kg max · ICP-MS
SOLUBILITY	Water miscible	PESTICIDES	Per USP Std · USP <561>
PRESERVATION	Compliant system		

03 · MICROBIOLOGY

TOTAL PLATE COUNT	100 cfu/g max · USP <2021>	E. COLI	Absent · USP <2022>
YEAST & MOLD	100 cfu/g max · USP <2021>	P. AERUGINOSA	Absent · USP <2022>
SALMONELLA	Absent / 25 g	S. AUREUS	Absent · USP <2022>

ACTIVE EPS

1.2%

12,000 ppm · MW ~1,291 kDa · liquid

INCLUSION RATE

2 to 5%

w/w liquid in finished product, by application

04 · STABILITY

PH

Stable across 4.0 to 8.0; optimal 5.5 to 7.5. Avoid high electrolyte loads, which can collapse viscosity.

THERMAL

Heat-stable. Tolerates standard emulsification to 80 °C; add in cool-down where possible for energy economy.

LIGHT

Photostable. No special light protection required for the active; pack to finished-product needs.

05 · USE & DOSAGE

Suitable for anti-aging serums (2 to 5%), hydrating creams (2 to 5%), eye contour (2 to 4%), and sheet-mask essences (2 to 5%). Add the liquid to the water phase or in cool-down under low to moderate shear; the powder concentrate (TB-02P) should be pre-hydrated in cold water before incorporation. Compatible with most nonionic and anionic systems; minimise added salt to preserve the polysaccharide network. Full incorporation methods and starter formulas in the Velura Application Guidelines.

06 · CERTIFICATIONS

ORIGIN	Spain
NOI · ISO 16128	>0.95
COSMOS	Eligible
ISO 22716	GMP
VEGAN	Yes

07 · MARKET APPROVAL

EUROPE	CosIng
USA	FDA
CHINA	IECIC
JP / KR	Listed
LATAM	ANVISA

08 · STORAGE & STATUS

STORAGE	5–25 °C
SHELF LIFE	24 months
PACKAGING	1, 5, 25 kg
ALLERGENS	None
GMO	Non-GMO

DISCLAIMER

Specifications reflect our current production standard (rev. 2026). Information is provided in good faith; the customer is responsible for verifying suitability and finished-product safety and regulatory compliance. Full stability and clinical dossier under NDA on request.