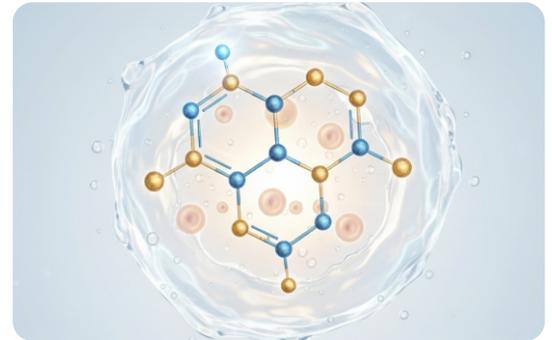


PRO-XYLANE

(Hydroxypropyl Tetrahydropyrantriol)

BIOTECH EDGE

Biotech-engineered from renewable plant sugars, Pro-Xylane embodies advanced molecular design in skin architecture renewal. Through **precision bioconversion** and green chemistry, it **translates xylose** (a natural wood sugar) **into a potent biomimetic molecule that restores the extracellular matrix from within**. This biotechnological innovation reinforces dermal structure, enhances GAG synthesis, and redefines firmness, representing a new era of science-driven skin resilience.



Pro-Xylane (Hydroxypropyl Tetrahydropyrantriol) is a bio-engineered active inspired by plant-derived xylose. Developed through advance research and stereoselective synthesis, it acts on the extracellular matrix (ECM) to restore the skin's foundational support system. By stimulating the synthesis of glycosaminoglycans (GAGs) and proteoglycans, it enhances water retention, dermal density, and elasticity from within. Pro-Xylane also **reinforces the dermal-epidermal junction (DEJ) by promoting collagen VII production,** improving cohesion and visible firmness.

PRODUCT DETAILS

INCI name:

**Hydroxypropyl
Tetrahydropyrantriol**

Recommended Dosage:

**1 – 10 % (1 % effective; 10 %
used in tests)**

Appearance:

**White to off-white
powder or clear solution**

APPLICATIONS :



Anti-aging and
firming serums



Lifting and contour
defining creams



Moisturizing and
smoothing formulations



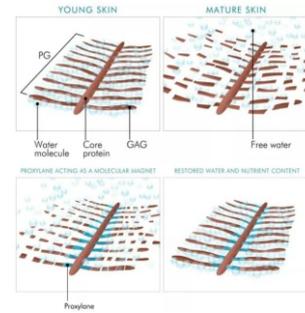
Skin-restructuring
and repair treatments

KEY FEATURES :

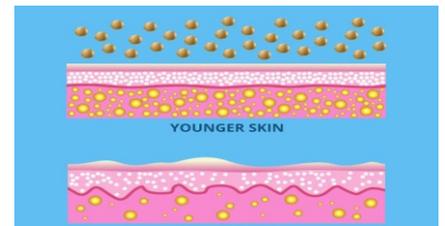
- Stimulates GAG & proteoglycan synthesis, rebuilding ECM structure
- Promotes collagen VII formation at the DEJ, tightening the skin matrix
- Strengthens dermal-epidermal adhesion, restoring firmness and elasticity
- Enhances moisture retention through GAG-mediated hydration

WHAT IT BRINGS TO YOUR FORMULATION :

- Scientifically proven restructuring active for next-generation anti-aging care
- Delivers visible lifting and density improvement
- Enhances synergy with hyaluronic acid and peptides
- Provides a high-performance claim base for premium skincare



EFFICACY STUDIES :



Anti-aging & Repair: Promoting the synthesis of GAGs and enhancing the production of proteoglycans. Preserve moisture GAGs are hydrophilic, retain water and promote wound healing

Compact skin & Anti-wrinkle Effect: Preventing wrinkles and improve drylines. Promoting the generation of collagen, so that the epidermis and dermis fit more closely, and the skin is tight and elastic

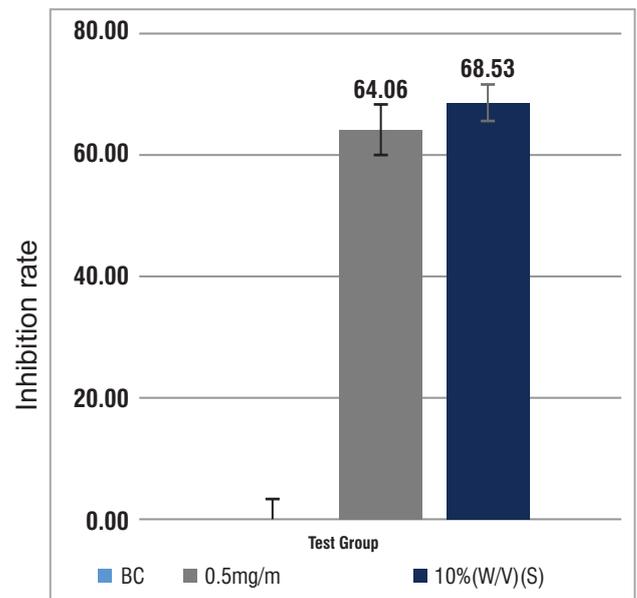
D0

D28



The results show that a 10% addition to the product can have a very good firming and anti-wrinkle effect.

The inhibition rate of hyaluronidase



CLINICALLY PROVEN BENEFITS :

- Boosts GAG synthesis and proteoglycan production in dermal cells
- Encourages collagen VII formation for improved DEJ integrity
- 10 % cream application showed visible firming and wrinkle reduction (D0–D28)
- Demonstrated soothing and moisturizing effect and hyaluronidase inhibition
- Safe for topical use – historical usage up to 10.5 % in leave-on formulations