

Xylastin™



firming skin active from green chemistry

Actera

Xylastin™

firming skin active from green chemistry

Actera

As we age, many experience wrinkling and sagging associated with loss of dermal thickness, hydration, and structure. Xylastin is a cosmetic active which improves the firmness, suppleness, and smoothness of skin by supporting the building blocks of skin structure.

INCI

Hydroxypropyl tetrahydropyrantriol

Applications

- Anti-aging face and body care products
- Recommended forms: serums, lotions, creams, masks

Key Benefits

- Improves skin firmness, density, and elasticity
- Reduces the appearance of fine lines and wrinkles
- Increases skin moisture retention and lipid profile to strengthen skin barrier
- Restores youthful radiance and complexion uniformity

Guidelines

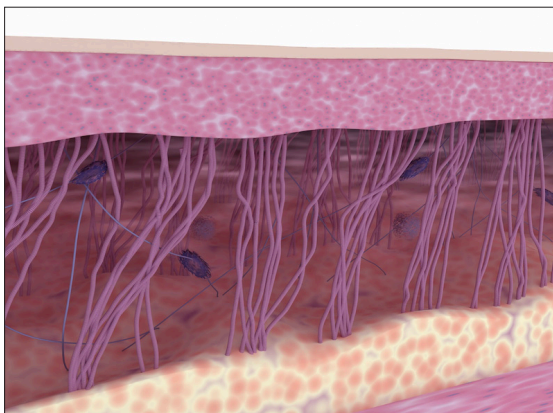
- Suggested use level: 3%
- Water soluble
- Heat sensitive; add below 40°C

Bioactive Rationale

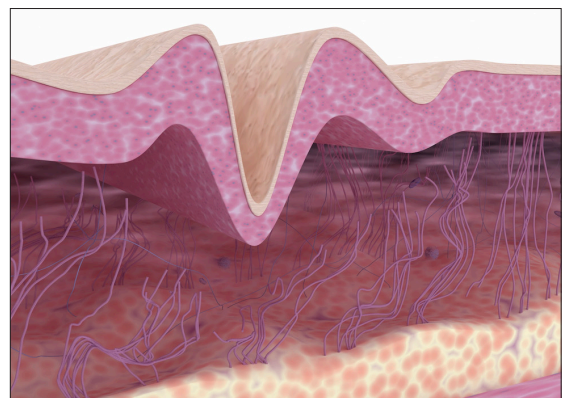
By rebalancing the dermal changes associated with aging, Xylastin can restore a more youthful skin appearance.

Long chain polysaccharides naturally present in the skin known as glycosaminoglycans (GAGs) are a common skincare target in anti-aging research. More prevalent in youth and decreasing with age, GAGs provide skin structure and elasticity, support hydration, and play an important role in keratin proliferation and inflammatory processes.¹ Xylastin has been shown to support the synthesis of skin matrix proteins including GAGs, increase expression of collagen, and optimize extracellular proteins responsible for providing skin elasticity and firmness.²

Young Skin: substantial structural elements support skin firmness and smoothness



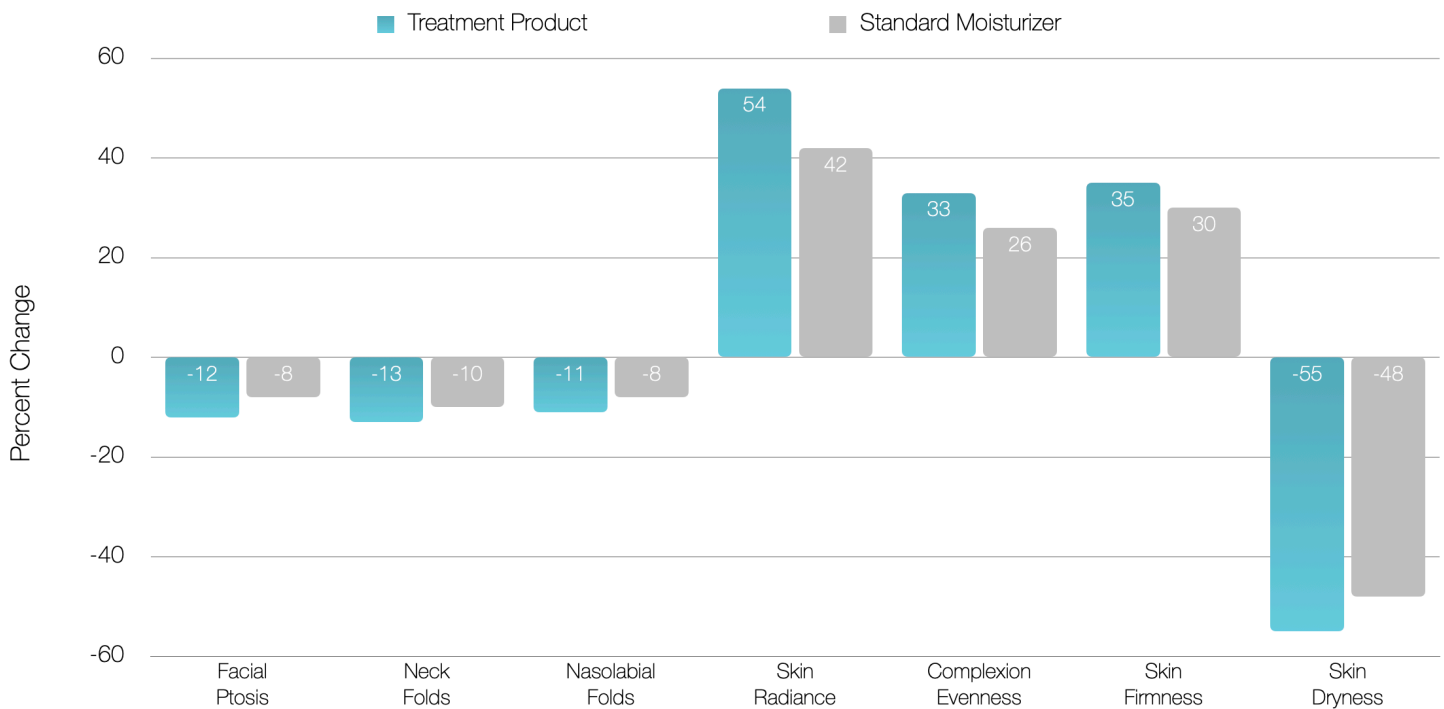
Aged Skin: degraded structural integrity leads to wrinkle formation and sagging



Clinical Results

Xylastin is clinically proven to improve the signs of skin aging.

In a study of 20 women age 55+ with mild to moderate wrinkles and uneven complexion, Xylastin was shown to significantly improve fine lines, firmness, radiance, complexion uniformity, and hydration over 12 weeks.³ Additionally, 240 post-menopausal women ages 55-65 using a 3% Xylastin treatment were studied over a period of 60 days. A significant improvement in skin sagging, nasolabial folds, radiance and complexion uniformity was observed. The lipid profile of the skin was also optimized, improving ratios of squalene, free fatty acids, and sterols which leads to a stronger skin barrier.⁴



Clinical results at day 60 vs. baseline

References

1. Wang, ST, et al. Glycosaminoglycans: sweet as sugar targets for topical skin anti-aging. *Clin. Cosmet. Investig. Dermatology*. 2021; 14: 1227-1246.
2. Sok, J, et al. Improvement of the dermal epidermal junction in human reconstructed skin by a new c-xylopyranoside derivative. *Eur J Dermatol*. 2008; 18 (3): 297-302.
3. Draelos, ZD, et al. An evaluation of the effect of a topical product containing Xylastin and blueberry extract on the appearance of type II diabetic skin. 2009; 8: 147-151.
4. Bouloc, A, et al. A compensating skin care complex containing pro-xylane in menopausal women: results from a multicentre, evaluator-blinded, randomized study. *Acta Derm Venereol*. 2017; 97: 541-542.

Actera

66 Walker Lane • Newtown, PA 18940 • USA
+1 (215) 525-4564
acteraingredients.com