



β Glucans solution

Saccharomyces cerevisiae soluble
beta glucans, 2 mg/ml

BACKGROUND

β-Glucans are macromolecular polysaccharides consists of D-glucose monomers linked through β-glycosidic bonds. They naturally occur in the cell walls of yeasts, bacteria, fungi, algae, lichens and plants, such as oats and barley. The macromolecular structure and biological activity of beta glucans depends on source, molecular weight and isolation method. Yeast beta-glucans possess skin regenerative properties, which involve revitalizing immune cells in the skin, strengthening the skin is ability to deal with adverse environmental effects, increasing collagen production and anti-aging, anti-wrinkle, anti-inflammatory, antioxidant properties. It has been shown, that beta glucan is an efficient film-forming moisturizer and a promoter of wound healing^{1,2,3}.

PROPERTIES	Colorless, odorless liquid. Water soluble, pH 5.5 – 6.5
INCI	Beta glucan
SAFETY AND QUALITY	Product is safe for the intended use. Manufactured under GMP and validated by appropriate analytical methods. Extracts passed microbial and contaminant tests.
APPLICATIONS	Cosmetics and cosmeceuticals.
STORAGE	Store in tight containers, protect from light. Keep below 25 °C.
COUNTRY OF ORIGIN	EU

CONTENTS AND BENEFITS

Yeast (*Saccharomyces cerevisiae*) beta glucan (CAS No 9012-72-0) solution, 2 mg ml⁻¹, prepared using unique biocatalyst.

Beta glucan mixtures of targeted molecular weight can be prepared that differ in solubility, membrane permeation properties and targeted biological activities:

- from 139 234 to 5 585 436 g mol⁻¹
- from 29 607 to 123 344 g mol⁻¹
- from 380 to 8 275 g mol⁻¹

Benefits of beta glucans to improve skin condition¹⁻³:

- Great water retention. Acts as film-forming moisturizer for skin and mucosa.
- Has a revitalizing effect on the skin. Defers skin aging, imparts skin whitening effect and cures skin damage effectively.
- Efficacy for reducing fine-lines and wrinkles.
- Treat collagen loss in aging skin due to impact on regeneration of collagen-producing cells.
- Good spread ability and skin smoothing effect.

REFERENCES

- 1 - DOI: 10.1016/j.foodhyd.2015.07.003
- 2 - DOI: 10.1016/j.tifs.2019.03.023
- 3 - DOI: 10.1002/ptr.4963