

PhytoSpherix™

PhytoSpherix™ is a completely natural form of glycogen, sourced and produced from plants by a patent pending new green process in Canada. It is dermatologist tested, non-irritating and hypoallergenic.

INCI Name	Glycogen
CAS	9005-79-2
Chemical Name	Homopolymer of α-D-Glucopyranose
Synonyms	Glycogen
Molecular Formula	(C ₆ H ₁₀ O ₅) _n
Molecular Weight	About 15 million Da



TYPICAL PROPERTIES*

Description	White to almost white powder
Appearance (1 % aqueous solution)	Opalescent solution
Phytoglycogen (% , dry basis)	≥ 98%
pH (1 % aqueous solution)	5.00 – 7.00
Loss on drying (105°C, 5 h)	≤ 7.0 %
Residue on ignition	≤0.5%
Microbial purity	Total aerobic plate count: ≤100 CFU /g
	Total yeast and molds: ≤100 CFU /g

(*) Although this information is typical of PhytoSpherix™, it should not be considered as a specification.

SHELF LIFE AND STORAGE

Shelf Life	3 years from date of manufacture
Packaging	1 kg / 500g/ 100g Aluminum pouches
Storage	Store in a clean, dry location at ambient temperature.

Applications: PhytoSpherix™ can be used in a wide range of cosmetics and personal care applications to provide anti-aging benefits, enhance moisture retention and skin feel, improve the photostability and/or thermostability of active ingredients, and the stability of emulsions.

Potential applications include:

- Moisturizing Creams, Lotions, Gels, Sprays, and Masks
- Nourishing Serums for Dry Skin
- Acne Treatment Films, Gels, and Clay Masks
- Sun Care Products
- Hair Treatments and Serums

Formulating with PhytoSpherix™:

Typical usage level ranges from 0.05-0.3% depending on the application and desired effect.

Moisturizing Creams: 0.1-0.2% when used alone, or 0.05-0.1% when used in combination with other actives (i.e. hyaluronic acid)

Anti-Aging Treatments: 0.1-0.3%

PhytoSpherix® is soluble in water and can be wetted with glycerin to quickly disperse. It can be added to the aqueous phase under moderate stirring before emulsification, or to the final phase after emulsification.

PhytoSpherix™:

- Forms clear solutions at low concentrations, and opalescent solutions at high concentrations
- Is non-ionic and demonstrates excellent compatibility with other cosmetic ingredients
- Is stable from pH 3-10, and in temperatures up to 180° C

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