

The red micro-algae Porphyridium Cruentum is known for its ability to secrete a viscous mucilage called EPS – External Polysaccharide. This substance is comprised of: galactose, glucose, xylose, manos, and D-glucuronic acid where xylose and galactose are more than 70% of the total mono-sugars. The EPS is negatively charged due to D-glucuronic acid and ester-sulfate groups. The reason this specific algae, along with a few other species, is exerting EPS, still needs to be elucidated. It is hypothesized that the EPS protects the algae's cells against desiccation, salinity, pH shifts, and bacterial infection.

Porphyridium polysaccharide has been investigated over the last decade and become of a special interest for various biotechnological applications due to its ability to act as a bioactive agent that can be used in various industry disciplines. In recent years, EPS has been integrated in more than 270 different cosmetic formulations acting as an anti-aging and antioxidant agent. In extensive research carried out over the past few years, it has been found that EPS is a powerful anti-inflammatory and anti-viral agent.

APPLICATIONS



Cosmetics

anti-aging, anti-inflammatory, antioxidant, soothing, and hydrating



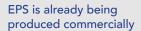
Medical

anti-inflammatory, hydro-gel, bio-lubricant, anti-viral, skin therapy (atopic dermatitis, skin eczema)



Nutraceuticals

dietary fiber and a dietary supplement as a cholesterol reducer



About Yemoja

At Yemoja, we cultivate a wide variety of micro-algae species and bring unique state-of-the-art biotechnology standards to the microalgae industry, producing a range of products for different high value industries. We help overcome industry challenges such as scalability of production systems, sustainability, compliance, and flexibility, by producing microalgae at scale with all-natural processes which can be easily and rapidly scaled up and adapted, meeting the highest industry standards.