

# EPS Revive

## Sulfated Polysaccharide from *Porphyridium Cruentum*

*Anti-aging, Anti-inflammatory Agent with Many Applications*

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, mannos, 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 excreting 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

EPS is already being produced commercially

## 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.