

γ-PGA Powder



Allowed Input
Cert. No. 19013

Approved to use in
Organic Agricultural System

- Seawin's **γ-PGA POWDER** is entirely natural, hydrogenative, non-toxic, metal adsorptive, and biodegradable. Due to its many potential uses, it is an excellent substitute for chemical biopolymer syntheses that meets the safety standards and environmental requirements.

It is a natural occurring, multi-functional, and biodegradable biopolymer. It is produced through fermentation by *Bacillus subtilis* using glutamic acid. PGA consists of glutamic acid monomers crosslinked between α-amino and γ-carboxyl groups. It is water-soluble, edible and non-toxic towards human, and is environment friendly.

Seawin's Advantage

PGA(Polyglutamic Acid):

- Extracted from *Bacillus* fermentation, high concentration to provide excellent water and nutrient retention.
- Protects from frost by forming a layer of physical protection at the root and the leaf surface
- Protects from frost by enhancing the bio-membrane system's stability
- Protects from drought & heat stress: Strong water holding capacity, holds more water in soil, also the thin layer formed on the leaves reduces transpiration
- Growth promoting properties: Can be broken down into short chain amino acids overtime and becomes available nutrient for plants' uptake

Seawin's Polysaccharide:

Patented multi-step enzymatic extraction method extracts consistent and high quality Polysaccharide, which brings the following benefits:

- Natural chelating agent
- Soil buffering agent
- Bio-stimulant properties
- Reduces stress and aids recovery
- Improve soil structure

Product Features

- Water retention
- Fertiliser retention
- Enhance resistance to stress
- Increases yield and improves quality

Product Analysis

PGA.....	10%
Polysaccharides.....	2%
Organic Matter.....	30%
N.....	3%
K ₂ O.....	15%
Trace Elements	
B.....	≥1.5%
Zn.....	≥1.0%

Physical Characteristics

Light Yellow Powder; pH 6-8

Application

Foliar Spray: 0.5-3kg/ha

Irrigation: 5-10kg/ha

For application suggestions specific to your crop, please contact your local agronomists or Seawin's distributors.

Packaging Sizes: 10kg

