

# Chemaxcel Corporation

## Technical Data Sheet

### Polyglutamic acid, Sodium Salt (PGA Na)

PGA Na is a natural, multi-functional and biodegradable biopolymer produced from L-glutamic acid through a fermentation process with a *Bacillus subtilis*. It is a water-soluble homo-polyamide consisting of D-glutamic acid and L-glutamic acid monomers connected by amide linkages between  $\alpha$ -amino and  $\gamma$ -carboxyl groups.

Brand Name: Maxcel PGA Na

INCI Name: Sodium Polyglutamate

Molecular Formula:  $(C_5H_7NO_3)_nNa$

CAS No.: 28829-38-1

Specifications:

Appearance: white to slightly yellow powder

Loss on drying:  $\leq 8.0\%$

pH (10g/L, 25°C): 6.3~7.3

Assay:  $\geq 90.0\%$  PAG-Na

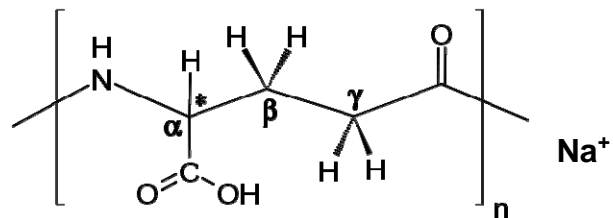
Molecular weight:  $\geq 2,000,000$  Daltons

Viscosity (1%, 60rpm):  $\geq 90$ mPa•s(cP)

Heavy metals (Pb) :  $\leq 20$ ppm

Arsenic:  $\leq 2$ ppm

Total plate count:  $\leq 100$ cfu/g



Packing: in aluminum bag of 1kg net each, or in cardboard drum containing 25kgs net.

Storage: keep away from light and moisture, to be stored in cool and dry place at room temperature.

Shelf life: 24 months from the date of manufacture, in the original unopened container under the suggested storage conditions.

Application: PGA Na has a wide number of potential uses ranging from personal care and cosmetics, food and medicine. When applied in cosmetic products, the moisturizing effect of PGA Na is better than that of Hyaluronic Acid and collagen protein, it can supply moisture to help the skin against a dry environment for a long period of time, it can also restore skin elasticity, smooth skin wrinkles. PGA-Na is applied in lotions and serums, the recommend dosage is 0.05%~1%.

### Chemaxcel Corporation

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