

TOA-SPR 2

- A potential candidate of synthetic polymer -

What is TOA-SPR 2:

It is well known that soybeans is one of the most popular foods in Japan, TOFU, SOY SOURCE, MISO, NATTO etc. Fermentation technology has been used for soyabeans to enrich the nutritious. TOA KASEI uses NATTO resin to develop TOA-SPR 2 with specialized process.

NATTO resin can absorb an incredible amount of water and after it exceeds its absorbent capacity, the resin turns into a jelly like substance and this remarkable property is already being to use in various fields to improve humanity's overall quality of life.

Uniqueness for TOA-SPR 2:

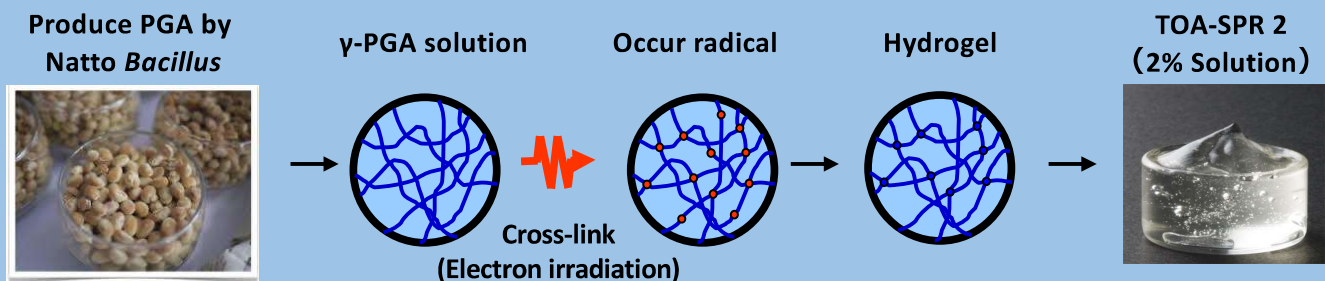
- Increase viscosity for liquid form cosmetic products
- Provide silky feeling
- Film forming effect
- Moisturizing effect is expected
- No chemical process
- Non-GMO
- Composed natural origin materials

Product description:

-Cross linked poly-glutamic acid-

INCI Name : Sodium Polygamma-Glutamate

Chinese INCI Name :聚 γ -谷氨酸钠



<Composition of TOA-SPR 2>

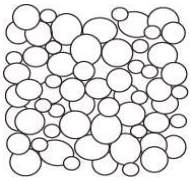
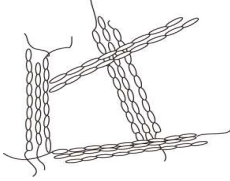
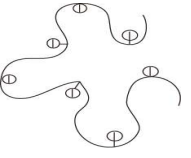
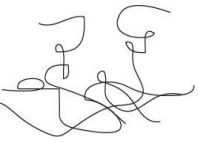
2% Sodium polygama-glutamate

2% 1,2-Hexanediol

2% 1,3-butylene glycol

94% Water

Structure image of each materials

Particulate gel 	TOA-SPR 2 Silky, absorb feeling	Chain-like 	Xanthan gum Hyaluronic acid Sticky
Electrostatic repulsion 	Carbomer (Acrylic acid polymer) Watery	Intertwingle 	polyethylene glycol Sticky

Moisturizing serum

#	INCI	w/w%
B	Sodium Polygamma-glutamate (TOA-SPR C2)	10.00
A	Xanthan gum	0.3
A	Buthylene Glycol	5.0
A	Trimethyl Glycine	2.0
A	1,2-Hexandiol	2.0
A	PEG/PPG/Polybuthylene Glycol-8/5/3 Glycerin	1.0
A	Water	79.4
C	Phenoxyethanol	0.3
	Total:	100.00

Performance of TOA-SPR 2

1. Provide silky and fresh texture
2. Moisturizing

Process

1. Mix A well and add B separately at room temperature.
2. Add B to A and homogenize at 8,000rpm for 5 min.
3. Add C after homogenization.

- TOA KASEI have not carried out stability test for above formulations.
- TOA KASEI does not guarantee free of intellectual properties, please respect the patent in each countries.

Application:

Skin care products Make up products

Recommended dosage:

1-50%

Suitable pH of formulation:

4-8