EM POWDER (300)

Eggshell Membrane Powder

Q.P. CORPORATION

Q.P. EM POWDER (300) derived from fresh eggshell membrane is a fine powder produced by our unique processes. EM POWDER (300) is stable against heat, acid, and alkaline, and has a moisturizing effect. This shows also characteristically the adsorbing ability of metals and odor. Furthermore, this contains abundantly sulfur amino acids that are said to be effective on the skin by taking them with ascorbic acid. Please utilize this as the material for various kind of foods and for cosmetics.

WHAT IS EGGSHELL MEMBRANE ?

Eggshell membrane is 70 μm thin layer membrane that is composed with mainly inner and outer membranes. The main component is a fiber-like protein that shows the meshy structure. This protein is comparably stable against acid, alkaline, and protease, and insoluble in water. This character is due to the reason that Cystine and Desmosine, which are highly contained in the amino acids that compose the protein of eggshell membrane, form the cross-linked molecular bridge. This character is generally close to the one of keratin.

Moreover, we have confirmed and reported (at the Japanese Biochemical Society in 1991) that the solubilized eggshell membrane tends to adhere to human cells and grow human skin fibroblasts and is likely to enhance the production of type Ⅲcollagen that has very important roles for maintaining the human skin structure,and keeping the flexibility and freshness of the skin.

AMINO ACID COMPOSITION (g /100g) (representative sample)

Lys	His	Arg	Trp	Asp	Thr	Ser	Glu	Pro
3.4	3.9	6.3	2.9	7.3	5.1	5.0	10.5	7.3

Gly	Ala	Cys	Val	Met	Ile	Leu	Tyr	Phe
5.5	2.5	9.2	6.0	3.8	3.2	4.8	2.3	1.8

NUTRITION FACTS (per 100g) (representative sample)

*	Calories	401 kcal
	Protein	92.4 g
	Fat	0.2 g
**	Carbohydrate	0 g
	Sodium	23.7 mg
	Water	5.7 g
	Ash	1.7 g

* : The value of calories is calculated based on the conversion factor in fifth edition of standard tables of food composition in Japan.

** : The content of carbohydrate is determined by Bertrand's method.

SPECIFICATIONS AND RESULTS (representative sample)

< for general uses >

	SPECIFICATIONS	RESULTS
DESCRIPTION	White to faint grey powder, having slight characteristic odor.	Passed
IDENTIFICATION	The solution that is the dispersion of 0.1 g of the sample in 10 mL of water shows purple color when it is heated for 3 minutes with 1 mL of Ninhydrin reagent.	Positive
LOSS ON DRYING	NMT 10.0 %	4.5 %
NITROGEN	NLT 14.0 %	16.3 %
HEAVY METALS	NMT 50 ppm	NMT 50 ppm
ARSENIC	NMT 2 ppm	NMT 2 ppm
AEROBIC PLATE COUNTS	NMT 3,000/g	NMT 10/g
PARTICLE SIZE	More than 90% of the sample has to be passed through 70 mesh sieve. (guaranteed)	Passed

< for food uses >

	SPECIFICATIONS	RESULTS
DESCRIPTION	White to faint grey powder, having slight characteristic odor.	Passed
MOISTURE	NMT 10.0 %	4.5 %
CRUDE PROTEIN	NLT 85.0 %	* 101.9 %
CRUDE FAT	NMT 1.0 %	NMT 0.1 %
ASH	NMT 5.0 %	2.7 %
HEAVY METALS	NMT 50 ppm	NMT 50 ppm
ARSENIC	NMT 2 ppm	NMT 2 ppm
AEROBIC PLATE COUNTS	NMT 3,000/g	NMT 10/g
COLIFORMS	Negative/0.1 g	Negative/0.1g
PARTICLE SIZE	More than 90% of the sample has to be passed through 70 mesh sieve. (guaranteed)	Passed

* : Multiplication of 6.25 to the content of nitrogen

REMARKS

This product does not contain any gene recombined agricultural products.

INCI name : Egg Shell Membrane Powder

STORAGE AND EXPIRATION PERIOD

Storage : Store at ordinary temperature and keep it away from high temperature and direct sunlight.

Expiration period : 2 years from manufacturing date. (unopened, at ordinary temperature)

PACKING

5 kg × 2

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