

MARINE SCIENCE CO., LTD.

Daiichi Sakamoto Building 7F, 2-1-11, Tel :81-3-3865-3485 Higashi-Kanda, Chiyoda-Ku, Tokyo 101-0031 Japan Fax:81-3-3865-3450 URL http://www.marine-science.co.jp e-mail: info@marine-science.co.jp

FOOD INGREDIENT MS-040119-05

QUALITY SPECIFICATION					
Product	TA-200				
Manufacturer	TACARA SDN BHD (MALAYSIA)				
Importer	MARINE SCIENCE CO.,LTD.				
Summary					

TA-200 is Kappa type fine mesh pure semi-refined carrageenan which composition has natural high polymeric hydrocolloid extracted from Kappaphycus Alvarezii (Eucheuma Cottonii) of Red Algae (Rhodophyta seaweed)

Characteristics

- ① It have non-smell, non-taste and creamy color fine mesh powder manufactured at sanitary and modern factory in Malaysia
- ② It have reaction to pulling up gel strength with K+, Ca+ and Mg.
- ③ The combination with L..B.G. will be makes quite elastic and high strength gel
- ④ It also makes excellent gel with ordinary (cow's) and soyabean milk.
- ⑤ It is good effect for milk products, processed meat and fish products.

	unopened 24 months from date of manufacture (keep dry in cool storage)							
Expiration Date	opened							
	Outer							
Package	Inner	Low-density Polyethelene bag for food (20 kg×1bag)						
abeling for usage of food								
0 0		Infor	nation of Material					
GMO material	No use the GMO material and their product.							
Allergen material	No use the 25 items of allergen materials, fish and shellfish							
Bovine original	No use the materials origin livestock meets including brain, eye, spinal cord, and around bowel							
Agricultural chemical residual	Never used agricultual chemicals.							
Unapproved Ingredient	No use the unapproved Food Additive Ingredient in Japan.							
		Pr	oduct standard					
Standardize items	Speci	fications	Analysis method					
Production No.	•							
		> 00%						
Particle size	200mesh pass >98%		200 mesh of Japanese Industrial Standard Sieve					
Loss on dry	not mo	re than 12%	dried 4h at 150°C					
pН	8 ~ 10		1.0% sol. at 60℃ by PH meter					
Viscosity (75°C)	50 ~ 250mPa·s		1.5% sol. at 75°C by B type viscosity meter					
Viscosity (30℃)			1.5% sol. at 30°C by B type viscosity meter					
Viscosity with Ca(30°C)			1.5% + 0.2% CaCl2 sol. at 30°C					
Water gel strength	200 ~ 300g/cm²		1.5% gel. at 10℃, measure inside-gel by reo-meter					
Salt gel strength	$500 \sim 700 \text{g/cm}^2$		1.5% + 0.2% KCL gel at 10℃, same as WG					
Milk gel strength	180	~ 230g/cm²	0.5% + 10% skim milk gel at 10° C, same as WG					
Total plate count	not more than 1,000/g		Standard method Agar					
Coliform	negative		Desoxycholate Agar					
E. coli	negative		Brilliant Green Lactose Bile Broth, EMB					
Yeast & Mold	nega	tive	Potato dextrose Agar					
Sulfate	15 ~	40%	Japanese standard of Food additive seventh edition 'Refined carrageenan'					
Acid insoluble matter	8 ~ 18%		Japanese standard of Food additive seventh edition 'Refined carrageenan'					
Ash	15 ~ 35%		Japanese standard of Food additive seventh edition 'Refined carrageenan'					
Acid insoluble Ash		re than 2%	Japanese standard of Food additive seventh edition 'Refined carrageenan'					
Arsenic as AS ₂ O ₃	not more	than 2 μ g/g	Japanese standard of Food additive seventh edition 'Refined carrageenan'					
	wy metal as Pb not more than $20 \mu g/g$		Japanese standard of Food additive seventh edition 'Refined carrageenan'					