



MARINE SCIENCES CO., LTD.

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FOOD INGREDIENT			
QUALITY SPECIFICATION			
Product	TCC		
Manufacturer	TACARA SDN BHD (Malaysia)		
Importer	MARINE SCIENCE CO.,LTD.		
Summary	TCC is alkali treated cottonii chips that compose Kappa type carrageenan processed from Kappaphycus Alvarezii (Eucheuma Cottonii) of Red Algae (Rhodophyta).		
Characteristics	<ul style="list-style-type: none"> ① It be ingredient of Kappa type carrageenan material. ② It have no smell, no taste and creamy color seaweed chips. ③ It have reaction to pulling up gel strength with K+, Ca+ and Mg. ④ The combination with L..B.G. will be makes quite elastic and high strength gel ⑤ It also makes excellent gel with ordinary (cow's) and soyabean milk. ⑥ It is good effect for milk products, processed meat and fish products. 		
Expiration Date	unopened	24 months from date of manufacture (keep dry in cool storage)	
	opened	60 days (seal and keep it in cool storage)	
Package	Outer	Poly-propylene bag	
	Inner	Polypropylene or Polyethylene bag (25 ⁺ 40 kg)	
Labeling for usage of food			
Information 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 agricultural chemicals.		
Unapproved Ingredient	No use the unapproved Food Additive Ingredient in Japan.		
Product standard			
Standardize items	Specifications	Analysis Result	Analysis method
Production No.			
Particle size	Form of chips		
Loss on dry	not more than 15%		dried 4h at 150°C
pH	8 ~ 10		1.0% sol. at 60°C by PH meter
Viscosity (75°C)	100 ~ 300mPa·s		1.5% sol. at 75°C by B type viscosity meter
Viscosity (30°C)			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/cm ²		1.5% gel. at 10°C, measure inside-gel by reo-meter
Salt gel strength	500 ~ 700g/cm ²		1.5% + 0.2% KCL gel at 10°C, same as WG
Milk gel strength	180 ~ 250g/cm ²		0.5% + 10% skim milk gel at 10°C, same as WG
Total plate count	/g		Standard method Agar
Coliform			Desoxycholate Agar
E. coli			Brilliant Green Lactose Bile Broth, EMB
Yeast & Mold			Potato dextrose Agar
Sulfate	15 ~ 40%		Follow to Japan food additive official method
Acid insoluble matter	8 ~ 18%		Follow to Japan food additive official method
Ash	15 ~ 35%		Follow to Japan food additive official method
Acid insoluble Ash	not more than 2%		Follow to Japan food additive official method
Arsenic as AS ₂ O ₃	not more than 2 μg/g		Follow to Japan food additive official method
Heavy metal as Pb	not more than 20 μg/g		Follow to Japan food additive official method