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FOOD INGREDIENT		CA-030527-01
QUALITY SPECIFICATION		
Product	KK-9F, Refined Carrageenan	
Manufacture	MSC CO.,LTD.(KOREA)	
Importer	MARINE SCIENCE CO.,LTD.	
Summary	<p>KK-9F is compound as mainly Kappa-type refined carrageenan which composition has taste-less and smell-less natural polymeric hydrocolloid extracted from red algae (<i>Kappaphycus alvarezii</i>), and it is standardized by salt.</p>	
Characteristics	<p>①KK-9F is dispersing and swelling to cold water. ②The dispersed solution is keep suspension which not easy to sedimentation. ③KK-9F have strong reaction of protein which will makes higher gel strength. ④KK-9F have excellent water retention which will be make higher yield of products. ⑤KK-9F is good for pickle solution of processed ham and sausage.</p>	
Expiration Date	unopened	24months from date of manufacture (Storage at dry and cool room)
	opened	30 days (Storage at dry and cool room)
Package	Outer	Woven cloth laminated paper bag
	Inner	Low-density Polyethelene bag for food (20kg × 1bag)
Labeling for usage of food		
Information of Material		
GMO material	No use the GMO materials and their processed.	
Allergen material	No use the materials of rice, crustacean and the product origin including the 25 items is assigned by Japan	
Bovine original	No use the materials origin livestock meets including brain, eye, spinal cord, and around bowel	
Agricultural chemical residual	Never used agrichemicals. or We would ensure standard value based of the Food hygiene law	
Unapproved Ingredient	No use the unapproved Ingredient in Japan.	
Product standard		
Standardize Items	Specifications	Analysis method
Type of Carrageenan	Kappa type	Japanese standard of Food additive seventh edition 'Refined carrageenan'
Appearance	White and yellowish powder	
Particle size	Pass 200mesh more than 95%	JIS Standard riddle pass
Loss on dry	Less than 12%	Japanese standard of Food additive seventh edition 'Refined carrageenan'
pH	8~10	1.5% sol. at 20°C,pH meter
Viscosity (75°C)	Not less than 20 m Pa·s	Japanese standard of Food additive seventh edition 'Refined carrageenan'
Viscosity (30°C)		
Water gel strength	700~900 g/cm ²	1.5% sol. at 20°C, Rheo meter
Solt gel strength		1.5% + 0.2% KCL sol. at 20°C, Rheo meter
Milk gel strength	150~200g/cm ²	0.5% +10% skimmed milk sol. at 20°C, Rheo meter
Plate coliform count	Less than 3000 /g	Japanese standard of Food additive seventh edition 'Refined carrageenan'
Coliform	Negative	BGLB broth
E.coli	Negative	Japanese standard of Food additive seventh edition 'Refined carrageenan'
Yeast & Mold	Negative	Potato dextrose broth
Sulfate	15~20%	Japanese standard of Food additive seventh edition 'Refined carrageenan'
Acid insoluble	Less than 2%	Japanese standard of Food additive seventh edition 'Refined carrageenan'
Ash	Less than 25%	Japanese standard of Food additive seventh edition 'Refined carrageenan'
Ash acid-insoluble	Less than 1%	Japanese standard of Food additive seventh edition 'Refined carrageenan'
Arsenic(as AS ₂ O ₃)	Less than 2 μg/g	Japanese standard of Food additive seventh edition 'Refined carrageenan'
Heavy metal(as Pb)	Less than 20 μg/g	Japanese standard of Food additive seventh edition 'Refined carrageenan'