



ORYZA OIL & FAT CHEMICAL CO., LTD.



PRODUCTS PROFILE

ORYZA OIL & FAT CHEMICAL CO. LTD.

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Ver. 23.1 WY

PRODUCTS from RICE (*Oryza sativa*)

Appeal point Product name	Life style-related diseases					Allergies· Inflammation			Beauty			
	Antihypertensive	Prevention of Hypertension· Arteriosclerosis	Anti-diabetic	Anti-obesity	Alcohol metabolism· Hepatoprotective	Improvement of Hay Fever and Atopic dermatitis	Anti-arthritis·Pain relief	Anti-inflammation	Whitening effect	Moisturizing effect	Cell activation· Improvement of metabolism	Anti-Wrinkle
RICE BRAN OIL RICE GERM OIL		○		○					○	○		
DEFATTED RICE BRAN				○								
GAMMA- ORYZANOL		○	○	○		○		○	UV absorption (down) Tyrosinase activity	○	○	
FERULIC ACID	○		○						○	○		
OCTACOSANOL				(up) Lipid metabolism	○							
ORYZA GABA®	○	○		(down) Blood TG	○							
ORYZA TOCOTRIENOL®		○		(down) Blood TG		○			Anti- pigmentation	(up) Hyaluronic acid production	(up) Dermal fibroblast growth	(up) Hyaluronic acid production
ORYZA CERAMIDE®						Decrease itching Inhibition of degranulation			(down) Melanin production and tyrosinase activities	○	(up) Dermal fibroblast growth	○
ORYZA STEROL		○								○		
ORYZA SQUALANE®										○		
FERMENTED RICE GERM EXTRACT												
PURPLE RICE EXTRACT		○	(down) α -glucosidase, aldose reductase activities	(down) Sugar absorption				○	(down) Melanin production and tyrosinase activities	(down) Elastase, hyaluronidase, collagenase activities		
ORYZA TRITERPENOID		○		(down) Fat absorption						(up) Collagen production	○	
RED RICE EXTRACT		Hypo- triglyceridemic	○							(down) Collagenase gene expression		
ORYZA PROTEIN®		Hypo- triglyceridemic		(up) Lipid metabolism								
ORYZA PEPTIDE	ACE inhibitor			(up) Lipid metabolism					(down) Melanin production	(down) Ceramidase and hyaluronidase gene expression (up) Collagen production		
ORYZA POLYAMINE		○	○	○		○		○			○	

Rice – derived

○: literature

Narration: data obtained by our own R&D group.

Beauty			Anti-aging					Others					Remarks
Anti-acne	Anti-glycation	Others(hair, nail)	Prevention of Ophthalmopathy	Improvement of brain function	Anti-cancer	Nutritional fortification • Immunostimulating effect • Improvement of libido	Anti-oxidative effect	For feeling of cold • Swelling • Improvement of peripheral circulation	Improvement of dysautonomia / post menopausal syndrome	Anti-stress • Relax • Anti-fatigue	Antibacterial effect • Deodorizing effect	Others	
		Skin cell activation					○		○				ORYZA SALAD OIL RICE BRAN OIL ORYZA RICE GERM OIL series RICE GERM OIL series ORYZA OIL-EX
					○							Relief of constipation	ORYZA DRIM
							Suppression of grease peroxidation	○	○	○			GAMMA-ORYZANOL ORYZA GAMMA MILKY ORYZA GAMMA-V®
				○	○								FERULIC ACID ORYZA FELULIX
				○		○						(up) Endurance	OCTACOSANOL -P series -L0.5 -LC0.5
				○	Prevention of colon cancer			○	○	○	○	(up) Alcohol metabolism	ORYZA GABA®GERM-P ORYZA GABA®EXTRACT -C -HC5 -HC90
					Prevention of colon cancer and breast cancer			○	○			Anti-fatigue	ORYZA TOCOTRIENOL® ORYZA TOCOTRIENOL® -90 -L10 ORYZA TOCOMIX -P15CD,-P27CD
					(up)Apoptosis/ Prevention of colon cancer				○				ORYZA CERAMIDE® -PT,-PCD,P10CD,-WSP,-WSP8 -L,-L0.8,-PC,-PCS,-WSPC,-WSPCS -LC,-LC0.8
					○							Prevention of prostatic hyperplasia	ORYZA STEROL -P,-PC,-L,-LC
													ORYZA SQUALANE®
						(up) Phagocytotic capacity of macrophages	SOD-like activity DPPH radical scavenging ability						FERMENTED RICE GERM EXTRACT -P,-PC -WSP,-WSPC
		Hair dye	Inhibition of retinal disorders/ Retinal angiogenesis		○		SOD-like activity DPPH radical scavenging ability					(down) Vitamin C oxidation	PURPLE RICE EXTRACT -P,-PC
												Estrogen-like action	ORYZA TRITERPENOID -C
					○		SOD-like activity DPPH radical scavenging ability						RED RICE EXTRACT -P,-PC, -WSP,-WSPC -LC
													ORYZA PROTEIN® -P70,-PC70
													ORYZA PEPTIDE -P60,-PC60
	○	○ (up) Hair growth Effect of hair cuticle repair				○	○					Effect of radiological protection	ORYZA POLYAMINE -P -LC (BG30)

PRODUCTS from OTHER PLANT SOURCES (1)

Appeal point Product name	Life style-related diseases					Allergies • Inflammation			Beauty			
	Antihypertensive	Prevention of Hypertension • Arteriosclerosis	Anti-diabetic	Anti-obesity	Alcohol metabolism • Hepatoprotective	Improvement of Hay Fever and Atopic dermatitis	Anti-arthritic • Pain relief	Anti-inflammation	Whitening effect	Moisturizing effect	Cell activation • Improvement of metabolism	Anti-Wrinkle
PERILLA SEED EXTRACT						(down) 5 and 12 lipoxygenase/histamine release		○		○		
PERILLA SEED OIL		○		○		(down) Leukotriene and histamine production				○		
EVENING PRIMROSE EXTRACT		○	(down) α-glucosidase, α-amylase, aldose reductase activities	(down) Sugar absorption					(down) Tyrosinase activity	○		
EVENING PRIMROSE OIL		(up) Cholesterol ester production	○	○		Improvement of GLA deficiency				○		
LITCHI SEED EXTRACT			(down) Aldose reductase activities and elevation of blood sugar	(up) Lipid metabolism					(down) Melanin production/Tyrosinase activity	(down) Hyaluronidase activity (up) Collagen production	(up) Dermal fibroblast growth	(down) Elastase, collagenase activities
BROCCOLI POWDER									(down) Melanin production/Tyrosinase activity			
LUTEIN												
BUCKWHEAT LEAF EXTRACT	○	○	○	(up) Lipid metabolism								
COFFEE BEAN EXTRACT	○		(down) α-glucosidase activities and sugar absorption	(down) Fat absorption (up) Lipolysis, fat combustion								
JAPANESE BUTTERBUR EXTRACT	Vasodilatation					(down) Leukotriene, histamine release and TNF-α production						
YUZU SEED EXTRACT		Hypo-triglyceridemic Suppression of cholesterol	(up) Sugar metabolism	(up) Lipid metabolism					(down) Melanin production	○	(up) Dermal fibroblast growth	
CITRUS UNSHIU EXTRACT		○		○			○		(down) Melanin production/Tyrosinase activity	○	(up) Dermal fibroblast growth	
ALPHA LIPOIC ACID			○	(down) Fat accumulation, appetite (up) Muscle-strengthening					(down) Melanin production	○	(up) Dermal fibroblast growth	
COCOA EXTRACT	○	○		(down) Fat accumulation (up) Lipid-metabolism								
KIWI SEED EXTRACT								(down) PG-production	(down) Melanin production/Tyrosinase activity	Clinical test in human		(up) Dermal fibroblast growth

○: literature

Narration: data obtained by our own R&D group.

Beauty			Anti-aging					Others				Remarks		
Anti-acne	Anti-glycation	Others(hair, nail)	Prevention of Ophthalmopathy	Improvement of brain function	Anti-cancer	Nutritional fortification • Immunostimulating effect • Improvement of libido	Anti-oxidative effect	For feeling of cold • Swelling • Improvement of peripheral circulation	Improvement of dysautonomia / post menopausal syndrome	Relax • Anti-fatigue	Anti-stress • Deodorizing effect		Antibacterial effect • Deodorizing effect	Others
							SOD -like activity		○			Anti-cariogenic bacterium Anti-periodontal bacterium Deodorization		PERILLA SEED EXTRACT -P, -PC, -WSP, -WSPC -L, -LC, -PO, -POC -LO, -LOGC
					(up) Apoptosis		SOD -like activity DPPH radical scavenging ability ORAC		○			Inhibition of <i>H. pylori</i> fixation and urease activities Deodorization		EVENING PRIMROSE EXTRACT -P, -PC, -WSPS, -WSPSC -PH, -WSPH, -LC
							○		Improvement of GLA deficiency					
					(up) Apoptosis		SOD -like activity DPPH radical scavenging ability <i>In vivo</i> antioxidant		○					LITCHI SEED EXTRACT -P, -PC, -WSP, -WSPC -LC
			○		(up) Phase II enzymes		<i>In vivo</i> antioxidant					Anti- <i>H.pylori</i>		BROCCOLI SPROUT POWDER BROCCOLI POWDER BROCCOLI SPROUT EXTRACT -PSI, -PSCI -PC
			Prevention of AMD		○		○							LUTEIN -P80, -PC80 -P40, -PC40 -L8
							SOD -like activity DPPH radical scavenging ability	(up) Peripheral circulation						BUCKWHEAT LEAF EXTRACT -P, -PC, -WSP, -LC
			○		Prevention of colon cancer		SOD -like activity DPPH radical scavenging ability							COFFEE BEAN EXTRACT -P, -PA, PCR
			○				○							JAPANESE BUTTERBUR POWDER -P, -PC -WSP, -WSPC, -LC JAPANESE BUTTERBUR POWDER
		(up) Skin turnover			○			Thermography		Anti-stress				YUZU SEED EXTRACT -P, -PC -WSP, -WSPC, -LC YUZU SEED OIL
					○		SOD -like activity DPPH radical scavenging ability					Inhibition of osteoporosis		CITRUS UNSHIU EXTRACT -P, -PC, -L, -LC
		(up) Skin turnover	○				<i>in vivo</i> antioxidant							ALPHA-LIPOIC ACID -P, -PC, -P80, -PC80 -WSP7, -WSPC7 -L1, -L1C1
							SOD -like activity DPPH radical scavenging ability	○						COCOA EXTRACT -P, -PC -WSP, -WSPC, -LC
(down) 5 α -reductase /Lipase activities		(up) Dermal fibroblast growth /Anti-under eye darkness					SOD -like activity DPPH radical scavenging ability							KIWI SEED EXTRACT -P, -PC, -LC -WSP, -WSPC KIWI FRUIT OIL

PRODUCTS from OTHER PLANT SOURCES (2)

Appeal point Product name	Life style-related diseases					Allergies• Inflammation			Beauty			
	Antihypertensive	Prevention of Hyperlipemia• Arteriosclerosis	Anti-diabetic	Anti-obesity	Alcohol metabolism• Hepatoprotective	Improvement of Hay Fever and Atopic dermatitis	Anti-arthritic•Pain relief	Anti-inflammation	Whitening effect	Moisturizing effect	Cell activation• Improvement of metabolism	Anti-Wrinkle
ASTAXANTHIN		○						○		○		○
RED GINGER EXTRACT			○	○	○		anti-arthropathia pain relief	○				○
WALNUT POLYPEHNOL	○	○	○	○	Suppression of fatty liver Hepato- protection				(down) Melanin production			
CHINESE CHIVE SEED EXTRACT					Suppression of lipid peroxidation				(down) Melanin production			
CISTANCE TUBULOSA EXTRACT	○	Suppression of cholesterol		(up) Lipid metabolism	○				(down) Tyrosinase activity	(down) Elastase, hyaluronidase activities		Anti-photo aging
RESVERATROL	○	○	○	○ Suppression of adipocyte differentiation		○		○	(down) Melanin production	(down) Elastase, collagenase, hyaluronidase activities		
WHITE JELLY FUNGUS EXTRACT		○	(up) Glycolytic activity	(down) Fat absorption and accumulation/ Appetite						Moisturizing effect		
STRAWBERRY SEED EXTRACT			(up) GLUT4 and insulin receptor gene expressions	(up) Lipid metabolism/ Lipolysis					(down) Tyrosinase and its related protein gene expressions	(up) Ceramide synthase and aquaporin gene expressions		(up) Hyaluronan acid synthase
LINGONBERRY EXTRACT	○								(down) Melanin production/ Tyrosinase activity			
FUCOXANTHIN			○	○					(down) Tyrosinase activity/ Melanogenesis related genes expressions	(down) Elastase, collagenase, hyaluronidase activities		(up) Collagen production
SAKURA EXTRACT								(down) NO production	(down) Melanin production/ Tyrosinase activity	(up) Dermal fibroblast growth/ Collagen lattice production		(up) Collagen lattice production
COPRINO®								(down) IL-6 production	(down) Melanin production/ Tyrosinase activity	(up) Hyaluronan synthase		Anti-photo aging
POLYAMINE			○	○		○		○			○	
BLACK GINGER EXTRACT	Blood pressure -lowering effect	○	○	○		○	○	○				
MAQUI BERRY EXTRACT		○	○					○				Anti-photo aging
WATERSHIELD EXTRACT		(down) Cholesterol/ Triglyceride	(down) elevation of blood sugar	(up) Lipid metabolism/ Adiponectin secretion (down) Fat accumulation/ Cellulite					(down) Tyrosinase activity	(down) Elastase, collagenase, hyaluronidase activities	(up) Dermal fibroblast growth	(up) Collagen/ Hyaluronan acid synthase
BIRD'S NEST EXTRACT								○		Moisturizing effect	(up) Dermal keratinocyte / fibroblast growth	(up) Skin elasticity, Dermal collagen density
PURPLE TEA EXTRACT				(down) Fat absorption and accumulation (up) Lipolysis					(down) Tyrosinase activity	Moisturizing effect		(up) Dermal collagen density

○:literature

Narration: data obtained by our own R&D group.

Beauty			Anti-aging					Others					Remarks
Anti-acne	Anti-glycation	Others(hair, nail)	Prevention of Ophthalmopathy	Improvement of brain function	Anti-cancer	Nutritional fortification • Immunostimulating effect • Improvement of libido	Anti-oxidative effect	For feeling of cold • Swelling • Improvement of peripheral circulation	Improvement of dysautonomia/ post menopausal syndrome	Anti-stress • Relax • Anti-fatigue	Antibacterial effect • Deodorizing effect	Others	
			○	○ <small>(down) Generation of ROS in brain cells</small>			○				○ <small>Anti-H₂O₂</small>		ASTAXANTHIN -5,-5C,-20,20C -P1,-PC1,-LS1,-LSC1
								○					RED GINGER EXTRACT -P,-PC -WSP,-WSPC -LC
		RAR ligand	○		○		○					(down) Bone absorption	WALNUT POLYPHENOL -P10,-PC10,-P30,-PC30 -WSP10,-WSPC10,-LC WALNUT SEED OIL
						(up) Testosterone secretion/ Immunity	○			Improvement of physical and mental fatigue		(up) Endurance Detoxification	CHINESE CHIVE SEED EXTRACT -P,-PC,-LC -WSP,-WSPC, CHINESE CHIVE SEED OIL
		(up) Hair growth		○ <small>(up) Human neuroblast growth</small>		○ Testosterone secretion	○ SOD -like activity DPPH radical scavenging ability	○ Cerebral or myocardial infarction	○	○		(up) Endurance	CISTANCHE TUBULOSA EXTRACT -P25,-PC25
Anti-acne				○ <small>(down) Generation of ROS in brain cells</small>	○	○	ESR SOD -like activity DPPH radical scavenging ability ORAC	○ Cardiopathy	○			Protection of nerve cell	RESVERATROL -P5,-PC5 -WSP0.5,WSPC0.5
				○			SOD -like activity DPPH radical scavenging ability					Relief of constipation Intestinal motility Protection of gastric mucosa	WHITE JELLY FUNGUS EXTRACT -P,-PC
(down) Sebum secretion		(up) HSP gene expression					SOD -like activity DPPH radical scavenging ability						STRAWBERRY SEED EXTRACT -P,-PC,-LC STRAWBERRY SEED OIL
	○						○	Thermography				Prevention of urinary tract infection	LINGONBERRY EXTRACT -J -PJ,-PJC -P0.5,-PC0.5,-LC
(down) Lipase activity	(down) AGE formation				○		SOD -like activity DPPH radical scavenging ability						FUCOXANTHIN -5KW,-1KW,-PIKW,-WSP0.1KW -5CKW,-1CKW,-PC1KW -WSP0.1KW
	(down) AGE formation, apoptosis	Hair care					○						SAKURA EXTRACT -P,-PC,-LC SAKURA SYRUP
							○						COPRINO [®] POWDER COPRINO [®] EXTRACT -P0.5,-PC0.5,-C,-LC
	○	(up) Keratin protein production				○	○					Effect of radiological protection	POLYAMINE-P
				Inhibition of Phosphodiesterase2 activity	○	○	SOD -like activity DPPH radical scavenging ability	Promotion of blood Peripheral circulation Improvement of capillary blood vessel shape			○	Improvement of gout Prevention of prostatic hyperplasia Prevention of hair loss	BLACK GINGER EXTRACT -P,-PC, -WPS,-WPSC,-LC
		(up) Hair growth	Inhibition of retinal photo-damage				○						MAQUI BERRY EXTRACT -P35,-PC35, -J,-LC
							<i>In vivo</i> antioxidant					Intestinal motility	WATERSHIELD EXTRACT -P,-PC, -WPS,-WPSC,-LC
		(up) Skin tight junction		○		○					○		BIRD'S NEST EXTRACT -P,-PC,-LC
		Anti-aging of skin					SOD -like activity DPPH radical scavenging ability						PURPLE TEA EXTRACT -P,-WSP,-PC,-WSPC,-LC

PRODUCTS from OTHER PLANT SOURCES (3)

Appeal point Product name	Life style-related diseases					Allergies• Inflammation			Beauty			
	Antihypertensive	Prevention of Hyperlipemia• Arteriosclerosis	Anti-diabetic	Anti-obesity	Alcohol metabolism• Hepatoprotective	Improvement of Hay Fever and Atopic dermatitis	Anti-arthritic•Pain relief	Anti-inflammation	Whitening effect	Moisturizing effect	Cell activation• Improvement of metabolism	Anti-Wrinkle
KIKU FLOWER EXTRACT		○		○	○	○	Anti-gout. Inhibition of XOD	○	○			Expression of Fillagrin, Type IV collagen
SEABERRY EXTRACT									Inhibition of dryness stimulation	○		
SEABERRY FRUTE OIL		○	○	○					○			
PASSIONFLOWER EXTRACT			○									
FucoRex™			○	Inhibition of fat accumulation and gain weight					(down) Tyrosinase activity Melanogenesis related genes expression	(down) Elastase, collagenase, hyaluronidase activities		(up) Collagen production
AGUAJE EXTRACT		○										
ISADA OIL	○	○		Inhibition of fat accumulation and gain weight (PPAR activation)			○					
TOMATO SEED EXTRACT		○						○			(up) Metabolism of extracellular matrix in skin	(up) Collagen and elastin production Maintenance of extracellular matrix in skin

○:literature

Narration: data obtained by our own R&D group.

Beauty		Anti-aging					Others					Remarks	
Anti-acne	Anti-glycation	Others(hair, nail)	Prevention of Ophthalmopathy	Improvement of brain function	Anti-cancer	Nutritional fortification• Immunostimulating effect• Improvement of libido	Anti-oxidative effect	For feeling of cold•Swelling• Improvement of peripheral circulation	Improvement of dysautonomia/ post menopausal syndrome	Anti-stress • Relax • Anti-fatigue	Antibacterial effect• Deodorizing effect		Others
	○		○	○	○		○	○			○	Anti-oxidation, Cardioprotective, Neuroprotective	KIKU FLOWER EXTRACT -P,-WSP,-PC,-WSPC, -LC
		Inhibition of skin irritation from air pollutants					Erimination of DPPH free radical					Improvement of BPH, Inhibition of overactive bladder, Improvement of urinary disturbance	SEABERRY EXTRACT -P,-WSP,-J
												Improvement of benign prostatic hyperplasia	SEABERRY FRUIT OIL
						○				Improvement of circadian rhythm, Improvement of quality of sleep			PASSIONFLOWER EXTRACT -P,-WSP,-PC,-WSPC
(down) Lipase activity	(down) AGEs formation				○		SOD-like activity DPPH radical scavenging ability						FucoRex TM -5 FucoRex -1
							○	○				Female hormone-like activity	AGUAJE EXTRACT -(oil),-P,-L, powder AGUAJE FRUIT OIL -(oil),-PC,-LC
				○			○	○					ISADA OIL ISADA OIL-P
							○						TOMATO SEED EXTRACT-P

PRODUCTS PROFILE

ORYZA OIL & FAT CHEMICAL CO., LTD.

PRODUCTS	CHARACTERISTICS	APPLICATIONS
ORYZA SALAD OIL ORYZA FRYING OIL	Rice bran oil extracted by NEM and refined by NRM process. The NEM (NEW EXTRACTION METHOD) consists of a new preparation method and a low temperature solvent extraction process. The NRM (NEW REFINING METHOD) consists of various modifications in the refining of the crude rice bran oil, especially a distillative deacidification process. The oils are superior to the other oils in taste, flavor, stability against oxidation, cold-resistance, cholesterol free, cholesterol lowering effect, <i>etc.</i> * NEM is a patented procedure in Japan. A finished product made by Oryza is available.	Snacks, cakes, cookies, mayonnaise, dressing oil, margarine, cooking oil, frying oil, <i>etc.</i>
RICE BRAN OIL	Rice bran oil extracted by NEM process and refined by NRM process for use in pharmaceuticals, cosmetics, <i>etc.</i> Superior taste and flavor, stability against oxidation and coldness and Cholesterol free. <i>INCI Name: Oryza Sativa (Rice) Bran Oil</i> Halal authorized product	healthy foods, cosmetics, health care products, bath additives, <i>etc.</i>
RICE GERM OIL ORYZA OIL S-1	Rice germ oil extracted from unpolished rice germ by NEM and refined by NRM. It is rich in γ -oryzanol (1.2 to 1.5%), vitamin-E and vegetable sterols. It is highly stable against oxidation and absorbs UV-ray. It also inhibits tyrosinase activity. <i>INCI Name: Oryza Sativa (Rice) Germ Oil</i> Halal authorized product Japanese patent No. 3704498	healthy foods, nutraceutical foods, cosmetics, health care products, bath liquid agents, preservation oil for meat, <i>etc.</i>
RICE GERM OIL-OZ30	Rice germ oil which guarantees a minimum of 30.0% of γ -oryzanol.	healthy foods, nutraceutical foods, <i>etc.</i>
ORYZA RICE GERM OIL-EC (Post ordered production)	Liquid oil extracted from rice germ by squeezing procedure and purified by physical refining method. It can be applicable for ECOCERT and contains high concentration of γ -oryzanol, Vit. E and phytosterol. <i>INCI Name: Oryza Sativa (Rice) Germ Oil</i>	Base for cosmetics and bath additives, <i>etc.</i>
ORYZA RICE GERM OIL-OEC (Post ordered production)	Liquid oil extracted from organic rice germ by squeezing procedure and purified by physical refining method. It contains high concentration of γ -oryzanol, Vit. E and phytosterol. ECOCERT-registered product <i>INCI Name: Oryza Sativa (Rice) Germ Oil</i>	Base for cosmetics and bath additives, <i>etc.</i>
ORYZA OIL-EX	Rice bran oil which is extracted by NEM and is refined by NRM process. It contains biological functional ingredients as follows; <ul style="list-style-type: none"> • more than 82 mg/ 100 g of tocopherols (vitamin E) • more than 89 mg/ 100 g of tocotrienols • more than 71 mg/ 100 g of γ-oryzanol • more than 1071 mg/ 100 g of rice sterol It reduces LDL-cholesterol level and exhibits anti-oxidative and anti-lipid-peroxidative activities. <i>INCI Name: Oryza Sativa (Rice) Germ Oil</i>	functional oil, supplements, snacks, cakes, cookies, mayonnaise, dressing oil, margarine, cooking oil, frying oil, <i>etc.</i>

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PRODUCTS	CHARACTERISTICS	APPLICATIONS
FATTY ACID -I -R -T	Rice bran-derived fatty acids separated and refined from NEM crude oil. 3 types of fatty acids classified by the melting point, color, iodine value and the value of neutralization are available. They are liquid type or semisolid types.	plasticizer, natural soap, paint, <i>etc.</i>
GAMMA ORYZANOL ORYZA GAMMA®-V	Natural extract purified from rice bran and germ oil. It possesses higher stability than Vit. E against oxidation and heat. γ -oryzanol exhibits following activities. Cholesterol lowering, growth, improving blood circulation, skin thermogenesis, improving dysautonomia and postmenopausal disorders. It also absorbs UV-ray and inhibits tyrosinase activity. Acute toxicity: LD50 more than 10 g/kg Repeated oral toxicity (180 days): negative Teratogenesis: negative Carcinogenesis: negative Skin corrosion: negative Skin irritation: negative Skin sensitization: negative Halal authorized product ORYZA GAMMA®-V: COSMOS-certified product <i>INCI Name: Oryzanol</i>	medical supplies for autonomic imbalance, menopausal disorder, headache, arthralgia, lumbago, <i>etc.</i> cosmetics, healthy foods, nutraceutical foods, health care products, anti-oxidizing agents, anti-coloring agents, anti-fading agents, natural agent to improve meat quality, <i>etc.</i>
ORYZA GAMMA MILKY	White milky liquid of γ -oryzanol emulsified by our original technology. It guarantees more than 5% γ -oryzanol and is stable against oxygen, heat, and bacteria. It is effective for moisture purpose, anti-oxidation and inhibition of tyrosinase activity. It is easily suspended in water Patch test (human): negative <i>INCI Name: Glycerin, Water, Caprylic/Capeic Triglyceride, Polyglyceryl-10 oleate, Oryzanol, Lecithin</i>	cosmetics, healthy foods, health care products, anti-oxidizing agents, anti-coloring agents, anti-fading agents, natural agent to improve meat quality, <i>etc.</i>
FERULIC ACID ORYZA FELURIX	Natural ingredient manufactured by hydrolyzation of γ -oryzanol. It is stable against oxidization and is more effective than γ -oryzanol for UV-ray absorption. It also inhibits nitrosamine generation and exhibits anti-carcinogenic activity. Acute toxicity: LD50 more than 857 mg/kg Ames test: negative, Skin irritation: mild irritation Eye irritation: medium irritation, Skin sensitization: negative <i>INCI Name: Ferulic Acid</i> ORYZA FELURIX: COSMOS-certified product	cosmetics, anti-oxidizing agents, <i>etc.</i>

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PRODUCTS PROFILE

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PRODUCTS	CHARACTERISTICS	APPLICATIONS
OCTACOSANOL -P1 -P8 -P10 -P12 -P45 -P60	Natural mixtures of high molecular alcohols derived from rice. They contain high concentration of octacosanols (more than 1 to 60%) which consists of high alcohols with 20 to 36 carbons. OCTACOSANOL exhibits following activities. 1. Enhance physical endurance, vitality and energy. 2. Enhance Muscle power, 3. Improve response speed, 4. Improve cardio functions, 5. Relief muscle pain, 6. Enhance basal metabolism, 7. Enhance oxygen delivery, 8. Stimulate secretion of sexual hormones, 9. Reduce systolic blood pressure, 10. Anti-stress. Acute toxicity: LD50 more than 2 g/kg	nutraceutical foods, foods, health care products, cosmetics, <i>etc.</i>
OCTACOSANOL -L0.5 -LC0.5	Emulsified liquid of octacosanol for functional drink. It contains more than 0.5% octacosanol and is easily soluble in water.	nutraceutical foods, foods (drink), cosmetics, <i>etc.</i>
ORYZA GAMMA MIX	Finely grinded NEM defatted rice bran, which contains more than 50% of γ -oryzanol.	bath liquid agents, scrubbing agents
ORYZA DRIM	Finely grinded edible type of defatted rice bran, rich in vegetable fibers, proteins, and carbohydrates. The moisture is less than 2%. It is effective for diet and constipation. The fiber content is 33.2 g/100g.	nutraceutical foods, dietary fiber, <i>etc.</i>
ORYZA DRIM V-50	Finely powdered special rice bran containing minimum of 50% γ -oryzanol. <i>INCI Name: Oryzanol, Defatted Rice Bran</i>	bath additives, scrubs, <i>etc</i>
DEFATTED RICE BRAN	Finely grinded rice bran defatted by NEM and sterilized. The particle size is mono-dispersed. <i>INCI Name: Defatted Rice Bran</i>	cosmetics
DEFFATED RICE BRAN-EC30, EC80 (Post ordered production)	Powder manufactured by squeezing, defat and sterilization processes from rice germ. It can be applicable for ECOCERT. The standardized mesh sizes are 30 and 80 mesh. <i>INCI Name: Defatted Rice Bran</i>	base for cosmetics
DEFFATED RICE BRAN-OEC30, OEC80 (Post ordered production)	Powder manufactured by squeezing, defat and sterilization processes from organic rice germ. It can be applicable for ECOCERT. The standardized mesh sizes are 30 and 80 mesh. <i>INCI Name: Defatted Rice Bran</i>	base for cosmetics
ORYZA GERM-DLP	Rice germ standardized the particle size to 42 mesh-through more than 90% and to 60 mesh-through more than 70%. It is manufactured from selected NEM defatted rice bran. Acute toxicity: LD50 more than 2 g/kg	foods, nutraceutical foods, <i>etc.</i>
ORYZA GERM-DLS	Rice germ standardized the particle size to 200 mesh-through more than 90%. It is manufactured from selected NEM defatted rice bran. Acute toxicity: LD50 more than 2 g/kg	foods, nutraceutical foods, <i>etc.</i>

PRODUCTS PROFILE

ORYZA OIL & FAT CHEMICAL CO., LTD.

PRODUCTS	CHARACTERISTICS	APPLICATIONS
ORYZA GABA [®] GERM-P	<p>Finely grinded 100% rice germ powder defatted by NEM. It contains concentrated γ-aminobutylic acid (GABA) produced by internal enzymes in rice germ. GABA is known to suppress sympathetic nerve activity and thereby decrease blood pressure and heart pulse rate. ORYZA GABA[®] GERM-P contains GABA in range of 300 to 400 mg/ 100 g. It also contains high quantity of natural vitamins and minerals including B₁, B₂, B₆, magnesium, zinc, and fibers. Following effects have confirmed in GABA. 1. Improve insomnia, depression and autonomic imbalance, 2. Improve postmenopausal symptoms, 3. Suppress high blood pressure, 4. Exhibit anti-obesity effect.</p> <p>A finished product made by Oryza is available.</p> <p>Acute toxicity: LD50 more than 2 g/kg</p>	nutraceutical foods, foods, cosmetics, etc.
ORYZA GABA [®] EXTRACT -C	<p>Water-soluble powder of ORYZA GABA[®] GERM-P containing highly concentrated GABA produced by internal enzymes in the germ. GABA is known to reduce sympathetic nerve activity and thereby decreases blood pressure and heart pulse rate. ORYZA GABA[®] EXTRACT-C contains more than approx. 500 mg/100g of GABA, which is approx. twice of ORYZA GABA[®] GERM-P.</p> <p>Acute toxicity: LD50 more than 2 g/kg</p> <p><i>INCI Name: Dextrin (and) Oryza Sativa (Rice) Germ Extract</i></p>	nutraceutical foods, foods, etc.
ORYZA GABA [®] EXTRACT -HC5	<p>Highly concentrated water-soluble powder of ORYZA GABA[®]. It contains more than 5% GABA.</p> <p>Acute toxicity: LD50 more than 5 g/kg</p> <p><i>INCI Name: Oryza Sativa (Rice) Germ Extract (and) dextrin</i></p>	nutraceutical foods, foods, etc.
ORYZA GABA [®] EXTRACT -HC90	<p>Highly concentrated water-soluble powder of ORYZA GABA[®]. It contains more than 90% GABA. The absorbability from gut is approx. twice of synthetic GABA.</p> <p>Acute toxicity: LD50 more than 2 g/kg Ames test: negative</p> <p><i>INCI Name: Aminobutylic acid</i></p>	nutraceutical foods, foods, etc.
ORYZA SQUALANE [®]	<p>Phytosqualane derived from 100% rice bran and germ. It contains more than 75% squalane and exhibits high moisturizing and water holding effects.</p> <p>Acute toxicity: LD50 more than 5 g/kg</p> <p><i>INCI Name: Squalane</i></p>	cosmetics

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PRODUCTS PROFILE

ORYZA OIL & FAT CHEMICAL CO., LTD.

PRODUCTS	CHARACTERISTICS	APPLICATIONS
<p>ORYZA TOCOTRIENOL[®] ORYZA TOCOTRIENOL[®] -90</p>	<p>Natural blend of tocotrienols and vitamin E extracted and concentrated from rice bran oil distillate. Tocotrienols belong to a family of vitamin E and are considered to be one of the most powerful antioxidants. Scientific studies reported that tocotrienols reduced cholesterol levels in human with hypercholesterolemia and prevented atherosclerosis. Tocotrienols also inhibits the growth and proliferation of breast cancer cells.</p> <p>ORYZA TOCOTRIENOL[®] contains more than 16% total tocotrienols. Total tocotrienols and tocopherols contents are more than 30%. Acute toxicity: LD50 more than 5 g/kg Patch test (human): negative <i>INCI Name: Oryza Sativa (Rice) Bran Oil (and) Tocotrienols (and) Tocopherol</i></p> <p>ORYZA TOCOTRIENOL[®]-90 contains more than 60% total tocotrienols. Total content of tocotrienols and tocopherols is more than 90%. Acute toxicity: LD50 more than 5 g/kg <i>INCI Name: Tocotrienols (and) Tocopherol (and) Oryza Sativa (Rice) Bran Oil</i></p> <p>ORYZA TOCOTRIENOL[®]: COSMOS-certified product</p>	<p>nutraceutical foods, foods, cosmetics, etc.</p>
<p>ORYZA TOCOMIX -P15CD</p>	<p>Powder type of ORYZA TOCOTRIENOL[®]. It is superior in long-term preservation and contains more than 8% total tocotrienols. Total tocotrienols and tocopherols content is more than 15%.</p>	<p>nutraceutical foods, cosmetics, etc.</p>

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PRODUCTS PROFILE

ORYZA OIL & FAT CHEMICAL CO., LTD.

PRODUCTS	CHARACTERISTICS	APPLICATIONS
ORYZA TOCOMIX -P27CD	Powder type of ORYZA TOCOTRIENOL [®] . It is superior in long-term preservation and contains more than 18% total tocotrienols. Total tocotrienols and tocopherols content is more than 27%.	nutraceutical foods, foods, <i>etc.</i>
ORYZA TOCOTRIENOL [®] -L10	Liquid type of ORYZA TOCOTRIENOL [®] for functional drinks. It contains more than 7.0% of total tocotrienols. Total tocotrienols and tocopherols content is more than 10.0%.	nutraceutical foods, foods, cosmetics, <i>etc.</i>
ORYZA CERAMIDE [®] -PT -PCD -P10CD -WSP -WSP8 -L -L0.8	Glycosphingolipids extracted and refined from rice bran and rice germ. These products have outstanding inhibitory effect on melanin formation, moisturizing effect, and improvement of barrier function and of atopic dry skin. PT, PCD and WSP contain more than 3.0% glycosphingolipids. P8 and WSP8 contain more than 8.0% glycosphingolipids. P20CD contains more than 20% glycosphingolipids. WSP and WSP8 are water-soluble powder. L and L0.8 are emulsion containing more than 0.3 and 0.8% glycosphingolipids. -PCD: Halal authorized product Clinical data of synergistic effect of Oryza ceramide and kiwi extract is available. Acute toxicity: LD50 more than 5 g/kg Repeated oral toxicity (28 days): negative	nutraceutical foods, foods, <i>etc.</i>
ORYZA CERAMIDE [®] -PC -PC8 -WSPC -WSPC8 -LC -LC0.8	Glycosphingolipids extracted and refined from rice bran and rice germ. For cosmetics, same effects as nutraceutical foods above. -PC: Halal authorized product ORYZA CERAMIDE [®] -PC, PC8, PC20 <i>INCI Name : Cyclodextrin (and) Oryza Sativa (Rice) Bran Oil(and)Glycosphingolipids</i> ORYZA CERAMIDE [®] -WSPC, WSPC8 <i>Maltosyl Cyclodextrin (and) Cyclodextrin (and) Dimaltosyl Cyclodextrin (and) Maltose (and) Oryza Sativa (Rice) Bran Oil (and) Glycosphingolipids</i> ORYZA CERAMIDE [®] -LC, LC0.8, LVC <i>INCI Name : Glycerin (and) Water (and) Polyglyceryl-10 Oleate (and) Lecithin (and) Oryza Sativa (Rice) Bran Oil (and) Glycosphingolipids</i>	cosmetics
PERILLA SEED EXTRACT -P -WSP -L	PERILLA SEED EXTRACT contains various kinds of flavonoids and polyphenols such as luteolin, apigenin, chrysoeriol, and rosmarinic acid. This product exhibits anti-allergic and anti-inflammatory activities responsible for strong 5-lipoxygenase inhibitory activities and inhibition of histamine release. Type-WSP is the water-soluble powder which can be used for drinks, <i>etc.</i> Type-L is liquid form. Acute toxicity: LD50 more than 2 g/kg Repeated oral toxicity (28 days): negative US patent No. 6217875 B1Japanese patent No. 4231559	nutraceutical foods, foods, <i>etc.</i>

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PRODUCTS PROFILE

ORYZA OIL & FAT CHEMICAL CO., LTD.

PRODUCTS	CHARACTERISTICS	APPLICATIONS
PERILLA SEED EXTRACT -PC -WSPC -LC	<p>These types of PERILLA SEED EXTRACT are for cosmetic use. Anti-allergic activity and also anti-inflammatory activity for human skin.</p> <p>PERILLA SEED EXTRACT-PC <i>INCI Name: Dextrin (and) Perilla Ocymoides Seed Extract</i></p> <p>PERILLA SEED EXTRACT-WSPC <i>INCI Name: Dextrin (and) Perilla Ocymoides Seed Extract</i></p> <p>PERILLA SEED EXTRACT-LC Acute toxicity: LD50 more than 2 g/kg Skin irritation: negative Eye irritation: slightly irritative Skin sensitization: negative Patch test (human): negative <i>INCI Name: Butylene Glycol (and) Water (and) Perilla Ocymoides Seed Extract</i></p>	cosmetics
PERILLA SEED EXTRACT -PO -LO	<p>PERILLA SEED EXTRACT for oral and dental care. These products exhibit antibacterial effect for periodontal diseases and also effective against dental caries bacteria such as <i>Streptococcus mutans</i> and <i>Porphyromonas gingivalis</i>.</p> <p>Acute toxicity: LD50 more than 2 g/kg Japanese patent No. 4112730</p>	dental care products, foods, etc.
PERILLA SEED OIL	<p>Oil from perilla seeds. It contains more than 55% α-linolenic acid and effective for allergy, inflammation, fat accumulation, etc. It also improves nervous system and immune response. α-linolenic acid is a sort of ω-3 fatty acids as well as DHA and EPA.</p> <p><i>INCI Name: Perilla Ocymoides Seed Oil (and) tocopherol (and) Ascorbyl Palmitate</i></p>	nutraceutical foods, foods, cosmetics, etc.
FERMENTED RICE GERM EXTRACT -P -WSP -PC -WSPC	<p>FERMENTED RICE GERM EXTRACT is made by Japanese fermentation technology which is traditionally used as a food processing technique using <i>Aspergillus oryzae</i>. It exhibits immunostimulatory activity and enhances the phagocytotic ability of macrophages. It also stimulates NK cell activity. WSP-type is water-soluble powder, applicable to functional drinks. PC and WSPC are used for cosmetics.</p> <p>Acute toxicity: LD50 more than 5 g/kg</p> <p>FERMENTED RICE GERM EXTRACT-PC <i>INCI Name: Aspergillus/Rice Germ Fermented Extract Firtrate (and) Dextrin</i></p> <p>FERMENTED RICE GERM EXTRACT-WSPC <i>INCI Name: Dextrin (and) Aspergillus/Rice Germ Fermented Extract Firtrate</i></p>	nutraceutical foods, foods, cosmetics, etc.

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PRODUCTS PROFILE

ORYZA OIL & FAT CHEMICAL CO., LTD.

PRODUCTS	CHARACTERISTICS	APPLICATIONS
EVENING PRIMROSE EXTRACT -P -WSPS	<p>The extracts are extremely rich in polyphenols (> 60%) including gallic acid derivatives (hydrolysable polyphenol). Major components are pentagalloylglucose, ellagic acid, proanthocyanidin, catechin and gallic acid. They are strong anti-oxidant with high SOD-like (350,000 units/g) and DPPH radical scavenging activities. The extracts are applicable for diabetes-relief with inhibitory effects on α-amylase and α-glucosidase. They also exhibit anti-obesity and preventive effect on metabolic syndrome with lowering effects of serum cholesterol and triglyceride levels. In addition, they inhibit melanin formation and induce apoptosis against cancer cell.</p> <p>WSPS type is water-soluble with > 50% polyphenols content. Acute toxicity: LD50 more than 5 g/kg Ames test: negative Clastogenicity: negative Micronucleus test: negative</p> <p>-P: Halal authorized product US patent No. 6932990 B2 EU patent No. 1312374 B1 Chinese patent No. 01816661 X Japanese patent No. 4873824</p> <p>Health functional food material separately approved by Korean Food & Drug Administration</p>	nutraceutical foods, foods, <i>etc.</i>
EVENING PRIMROSE EXTRACT -PC -WSPSC -LC	<p>The extract exhibits strong anti-oxidative, tyrosinase inhibitory effect and UV-ray absorption. LC is a liquid form for cosmetics.</p> <p>EVENING PRIMROSE EXTRACT-PC and -WSPSC <i>INCI Name: Oenothera Biennis (Evening primrose) Seed Extract</i> EVENING PRIMROSE EXTRACT-LC <i>INCI Name: Butylene Glycol (and) Water (and) Oenothera Biennis Seed (Evening primrose) Extract</i></p> <p>-PC: Halal authorized product</p>	cosmetics
EVENING PRIMROSE OIL	<p>Oil from evening primrose seeds containing high amount of γ-linolenic acid (> 9%) and total linolenic acids (> 60 %). The oil is effective for obesity, diabetes, hyperlipidemia, alcohol consumption, aging, allergy, inflammation, vitamin B₆ deficiency, <i>etc.</i></p> <p>Acute toxicity: LD50 more than 5 g/kg</p> <p><i>INCI Name: Oenothera Biennis (Evening Primrose) Oil (and) Tocopherol (and) Ascorbyl Palmitate</i></p>	nutraceutical foods, foods, cosmetics, <i>etc.</i>

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PRODUCTS PROFILE

ORYZA OIL & FAT CHEMICAL CO., LTD.

PRODUCTS	CHARACTERISTICS	APPLICATIONS
ORYZA STEROL -P -L	<p>ORYZA STEROL is extracted from rice bran and rice germ. This product includes neither GMO ingredients nor specific allergy-causing substances.</p> <p>ORYZA STEROL-P contains more than 90% sterols. It exhibits cholesterol-lowering effect and improves prostatic hyperplasia. Acute toxicity: LD50 more than 2 g/kg</p> <p>ORYZA STEROL-L is liquid type of rice sterol, which is easily soluble in water and also is quite stable for long term preservation. It contains more than 3.0% sterols. Acute toxicity: LD50 more than 5 g/kg</p>	nutraceutical foods, foods, <i>etc.</i>
ORYZA STEROL -PC -LC	<p>ORYZA STEROL for cosmetics. This product exhibits moisture retention effect.</p> <p>ORYZA STEROL-PC Acute toxicity: LD50 more than 2 g/kg <i>INCI Name: Oryza Sativa (Rice) Bran Sterol</i></p> <p>ORYZA STEROL-LC Acute toxicity: LD50 more than 5 g/kg <i>INCI Name: Glycerin (and) Water (and) Caprylic/Capric Triglyceride (and) Polyglyceryl-6 Laurate (and) Oryza Sativa (Rice) Bran Sterol (and) Lecithin</i></p>	cosmetics
BROCCOLI SPROUT EXTRACT BROCCOLI SPROUT EXTRACT -PS1 -PC -PSC1 BROCCOLI SPROUT POWDER BROCCOLI POWDER	<p>Sulforaphane in broccoli exhibits strong detoxification and anti-oxidative activities. Broccoli sprout contains 20 to 50 times higher contents of sulforaphane than that of mature broccoli.</p> <p>BROCCOLI SPROUT EXTRACT is water-soluble powder containing more than 2% sulforaphane. Acute toxicity: LD50 more than 5 g/kg as broccoli sprout extract.</p> <p>BROCCOLI SPROUT EXTRACT-PS1 is water-soluble powder containing 1% sulforaphane.</p> <p>BROCCOLI SPROUT EXTRACT-PC is used for cosmetics. <i>INCI Name: Dextrin (and) Brassica Oleracea Italica (Broccoli) Sprout Extract</i></p> <p>BROCCOLI SPROUT POWDER contains more than 1.2% sulforaphane. Acute toxicity: LD50 more than 5 g/kg</p> <p>BROCCOLI POWDER contains more than 400 ppm of sulforaphane. Green powder from matured broccoli. Acute toxicity: LD50 more than 5 g/kg as broccoli sprout extract</p> <p>-PC: Halal authorized product Japanese patent No. 3754646, 5571280</p>	nutraceutical foods, foods, cosmetics, <i>etc.</i>

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PRODUCTS PROFILE

ORYZA OIL & FAT CHEMICAL CO., LTD.

PRODUCTS	CHARACTERISTICS	APPLICATIONS
<p>LITCHI SEED EXTRACT</p> <p>-P</p> <p>-WSP</p> <p>-PC</p> <p>-WSPC</p> <p>-LC</p>	<p>Litchi is well known that Yang Guigei, one of the most beautiful queens in ancient China, willingly ate the fruits. LITCHI SEED EXTRACT extracted from litchi seeds exhibits anti-oxidative, SOD-like, DPPH radical scavenging activities. The extract suppresses tyrosinase, elastase, collagenase and hyaluronidase activities. Moreover, it enhances collagen production and inhibits melanogenesis.</p> <p>Acute toxicity: LD50 more than 5 g/kg</p> <p>Repeated oral toxicity (28 days): negative</p> <p>LITCHI SEED EXTRACT-P contains more than 12% polyphenol.</p> <p>LITCHI SEED EXTRACT-WSP is water-soluble powder applicable to beverages.</p> <p>LITCHI SEED EXTRACT-PC and -WSPC are powders for cosmetics.</p> <p><i>INCI Name: Litchi Chinensis Seed Extract (and) Dextrin</i></p> <p>ECOCERT registered product</p> <p>LITCHI SEED EXTRACT-LC is liquid for cosmetics.</p> <p><i>INCI Name: Water (and) Butylene Glycol (and) Litchi Chinensis Seed Extract</i></p> <p>Eye irritation: negative, Skin irritation: negative, Phototoxicity: negative, Clastogenicity: negative, Skin sensitization: negative, Photo sensitization: negative</p> <p>Ames test: negative, Patch test (human): negative</p> <p>-P, WSP, PC, WSPC: Halal authorized product</p> <p>-PC: COSMOS-certified product</p> <p>Japanese patent No. 3708036, 3953387, 4982052</p>	<p>nutraceutical foods, foods, cosmetics, etc.</p>
<p>LUTEIN</p> <p>-P80</p> <p>-P40</p> <p>-L8</p> <p>(Post ordered production)</p> <p>-PC80</p> <p>-PC40</p> <p>-LC8</p> <p>(Post ordered production)</p>	<p>Lutein is a typical carotenoid in Marigold flowers and exhibits preventive effect against AMD (Age-related Macular Degeneration).</p> <p>LUTEIN-P80 contains more than 80% lutein ester (40% free lutein), one of the highest content among other suppliers' products.</p> <p>Acute toxicity: LD50 more than 5 g/kg</p> <p>LUTEIN-L8 is water-soluble liquid.</p> <p>LUTEIN-PC80</p> <p><i>INCI Name: Tagetes Erecta Flower Extract (and) Tocopherol</i></p> <p>LUTEIN-PC40</p> <p><i>INCI Name: Dextrin (and) Tagetes erecta Flower Extract (and) Tocopherol</i></p> <p>LUTEIN-LC8</p> <p><i>INCI Name: Maltose (and) Maltodextrin (and) Caprylic/Capric Triglyceride (and) Tagetes Erecta Flower Extract (and) C10-18 Triglycerides (and) Lecithin</i></p>	<p>nutraceutical foods, foods, cosmetics, etc</p>

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PRODUCTS PROFILE

ORYZA OIL & FAT CHEMICAL CO., LTD.

PRODUCTS	CHARACTERISTICS	APPLICATIONS
<p>PURPLE RICE EXTRACT -P -PC</p>	<p>Purple rice has been used as medicinal foods for perennial youth and long life in ancient times, especially in Asia. PURPLE RICE EXTRACT is extracted from purple rice germ and exhibits many beautifying effects including inhibitory activities on elastase, hyaluronidase, collagenase, and tyrosinase. These effects promote anit-pigmentation and skin treatment effects. The main ingredients are anthocyanidins which exhibit antioxidative activity. The extract also exhibits α-amylase and α-glucosidase inhibitory activities leading to blood sugar control. Recently the extract was found to prevent eye disease, such as diabetic retinopathy, angiogenesis, AMD and glaucoma. Acute toxicity: LD50 more than 5 g/kg</p> <p>PURPLE RICE EXTRACT-PC can be used as hair dye and exhibits hair-protective effect.</p> <p>Eye irritation: negative, Skin irritation: negative, Phototoxicity: negative, Clastogenicity: negative, Skin sensitization: negative, Photo sensitization: negative Ames test: negative, Patch test (human): negative <i>INCI Name: Oryza Sativa (Rice) Extract (and) Dextrin</i></p> <p>PURPLE RICE EXTRACT-LC0.1 <i>INCI Name: Water (and) Butylene Glycol (and) Oryza Sativa (Rice) Extract</i></p> <p>Japanese patent No.5916205</p>	<p>nutraceutical foods, cosmetics, etc.</p>
<p>BUCKWHEAT LEAF EXTRACT -P -WSP -PC -WSPC -LC</p>	<p>Yellowish brown powder extracted from buckwheat leaves with aqueous ethanol. It contains minimum of 5% rutin as an active ingredient and enhances peripheral circulation especially. The extract improves feeling of cold, stiff shoulder and lower limbs oedema as well as arteriosclerosis and hypertension. WSP is water-soluble powder which can be used for beverage, etc.</p> <p>Acute toxicity: LD50 more than 5 g/kg</p> <p>BUCKWHEAT LEAF EXTRACT-PC <i>INCI Name: Dextrin (and) Polygonum Fagopyrum (Buckwheat) Leaf Extract</i></p> <p>BUCKWHEAT LEAF EXTRACT-LC <i>INCI Name: Butylene Glycol (and) Water (and) Polygonum Fagopyrum (Buckwheat) Leaf Extract</i></p>	<p>nutraceutical foods, cosmetics, etc.</p>

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PRODUCTS PROFILE

ORYZA OIL & FAT CHEMICAL CO., LTD.

PRODUCTS	CHARACTERISTICS	APPLICATIONS
<p>COFFEE BEAN EXTRACT -P -PA -PCR</p>	<p>Highly water-soluble powder without additives extracted from the raw coffee beans with aqueous ethanol. It guaranteed a minimum of 24% of chlorogenic acid and 45% chlorogenic acid related compounds. It is beneficial for the promotion of healthy weight loss and management. The extract inhibits dietary fat absorption and accumulation and promotes lipolysis and lipid metabolism. In addition, it prevents diabetes by inhibitory effect on intestinal α-glucosidase and hepatic gluconeogenesis. COFFEE BEAN EXTRACT is also an antioxidant beneficial to health (ORAC value: 8,700 μmole TE/g).</p> <p>COFFEE BEAN EXTRACT-P Acute toxicity: LD50 more than 1.5 g/kg Repeated oral toxicity (28 days): negative Ames test: negative</p> <p>COFFEE BEAN EXTRACT -PC <i>INCI Name: Coffea Arabica (Coffee) Seed Extract (and) Dextrin</i> ECOCERT-registered product</p> <p>US patent: 8802164 Japanese patent No. 4499665</p>	<p>nutraceutical foods, foods, cosmetics, etc.</p>
<p>EVENING PRIMROSE EXTRACT -PH -WSPH</p>	<p>Light-brown powder extracted from evening primrose seeds. Contains extremely condensed polyphenols. <i>Anti-H.pylori</i> activity, such as an inhibition of the growth, urease activity and adhesion/ fixation to gastric mucosa. Therefore, prevention and relief of gastritis or gastric ulcer can be expected. WSPH is water-soluble powder which can be used for beverages, etc.</p> <p>Acute toxicity: LD50 more than 5 g/kg Ames test: negative Clastogenicity: negative Micronucleus test: negative</p> <p>Japanese patent No. 4541662</p>	<p>nutraceutical foods, etc.</p>
<p>JAPANESE BUTTERBUR POWDER (Post ordered production)</p>	<p>Dried powder of aerial parts of Japanese butterbur. It contains K, Ca, minerals and dietary fibers.</p> <p>Acute toxicity: LD50 more than 2 g/kg</p> <p><i>INCI Name: Petasites Japonicus Powder</i></p>	<p>nutraceutical foods, foods, cosmetics</p>

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PRODUCTS PROFILE

ORYZA OIL & FAT CHEMICAL CO., LTD.

PRODUCTS	CHARACTERISTICS	APPLICATIONS
<p>JAPANESE BUTTERBUR EXTRACT</p> <p>-P -WSP -PC -WSPC -LC</p>	<p>Pale yellowish powder extracted from aerial part of Japanese butterbur with aqueous ethanol. It is rich in sesquiterpene (fukinin) and polyphenols (fukinolic acid, chlorogenic acid, caffeic acid, <i>etc.</i>). Fukinoside A is patented anti-allergic novel compound in Japan (No. 4822246). JAPANESE BUTTERBUR EXTRACT is renowned for its anti-allergic activity with inhibitory effects on mast cells degranulation, leukotriene synthesis, and TNF-α production. It is potentially preventive against type I allergic symptoms such as hay fever, atopic dermatitis and bronchial asthma. WSP is water-soluble powder.</p> <p>Acute toxicity: LD50 more than 2 g/kg Repeated oral toxicity (28 days): negative</p> <p>JAPANESE BUTTERBUR EXTRACT-PC and -WSPC <i>INCI Name: Dextrin (and) Petasites Japonicus Leaf/Stem Extract</i></p> <p>JAPANESE BUTTERBUR EXTRACT-LC <i>INCI Name: Butylene Glycol (and) Water (and) Petasites Japonicus Leaf/Stem Extract</i></p> <p>Japanese Patent No. 4822246</p>	<p>nutraceutical foods, foods, cosmetics, <i>etc.</i></p>
<p>YUZU SEED EXTRACT</p> <p>-P -WSP -PC -WSPC -LC</p>	<p>Yellowish-brown powder extracted from the seed of Yuzu, <i>Citrus junos</i> (Rutaceae). It is rich in limonoids and exhibits excellent skin whitening and rejuvenating effects. The extract enhances blood circulation and relaxation and improves metabolic syndrome by lowering the serum cholesterol and triglyceride. WSP is water-soluble and applicable to beverages.</p> <p>Acute toxicity: LD50 more than 5 g/kg Repeated oral toxicity (28 days): negative Ames test: negative, Skin irritation(EpiSkin): negative As YUZU SEED EXTRACT-PC, Eye irritation (BCOP method): slightly irritative Patch test (human): negative Ames test: negative</p> <p>YUZU SEED EXTRACT – PC and – WSPC <i>INCI Name: Dextrin (and) Citrus Junos Seed Extract</i></p> <p>YUZU SEED EXTRACT - LC <i>INCI Name: Butylene Glycol (and) water (and) Citrus Junos Seed Extract</i></p> <p>-P, WSP, PC, WSPC: Halal authorized product Japanese Patent No. 5014569</p>	<p>nutraceutical foods, foods, cosmetics, <i>etc.</i></p>
<p>YUZU SEED OIL</p>	<p>Oil from Yuzu seeds. Rich in unsaturated fatty acids, such as oleic acid and linolenic acid. Suitable for cosmetic and food applications. Skin irritation (EpiSkin method): negative <i>INCI Name: Citrus Junos Seed Oil</i></p>	<p>nutraceutical foods, foods, cosmetics, <i>etc.</i></p>

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PRODUCTS PROFILE

ORYZA OIL & FAT CHEMICAL CO., LTD.

PRODUCTS	CHARACTERISTICS	APPLICATIONS
<p>CITRUS UNSHIU EXTRACT</p> <p>-P</p> <p>-L</p> <p>-PC</p> <p>-LC</p>	<p>Yellowish powder extracted from the peel of Satsuma mandarin, <i>Citrus unshiu</i> (Rutaceae). It contains β-cryptoxanthin and hesperidin. Studies showed that it prevented post-menopausal osteoporosis and skin hyperpigmentation. The extract is a potent antioxidant. Type L is the emulsion for beverages.</p> <p>CITRUS UNSHIU EXTRACT-P Acute toxicity: LD50 more than 5 g/kg Ames test: negative</p> <p>CITRUS UNSHIU EXTRACT - PC <i>INCI Name: Cyclodextrin (and) Citrus Unshiu Peel Extract</i></p> <p>CITRUS UNSHIU EXTRACT - LC <i>INCI Name: Butylene Glycol (and) Citrus Unshiu Peel Extract</i></p>	<p>nutraceutical foods, foods, cosmetics, etc.</p>
<p>ALPHA-LIPOIC ACID</p> <p>-P</p> <p>-P80</p> <p>-L1</p> <p>-WSP7</p> <p>-PC</p> <p>-PC80</p> <p>-LC1</p> <p>-WSPC7</p>	<p>Alpha-lipoic acid is categorized as “an additive to be used in general food preparations or beverages” by the Japan Ministry of Health Labor and Welfare in 2004. It is a potent antioxidant and is effective for weight control and growth promotion of muscle cells. It also exhibits skin whitening and rejuvenating in effects.</p> <p>Type P is a yellowish crystalline powder containing a minimum of 98% α-lipoic acid. Acute toxicity: LD50 more than 405 mg/kg Ames test: negative</p> <p>P80 is an oil coated powder with highly stability.</p> <p>L1 is oily emulsion containing 10% α-lipoic acid. Acute toxicity: LD50 more than 2 g/kg</p> <p>WSP7 is water-soluble powder containing 7% α-lipoic acid.</p> <p>α-LIPOIC ACID-PC Eye irritation: medium irritative, Skin irritation: negative, Corrosivity: negative, Repeated skin irritation test: negative, Skin sensitization: negative <i>INCI Name: Thioctic Acid</i></p> <p>α-LIPOIC ACID-WSPC7 <i>INCI Name: Maltosyl Cyclodextrin (and) Thioctic Acid</i></p> <p>α-LIPOIC ACID-LC1 Acute toxicity: LD50 more than 2 g/kg <i>INCI Name: Polyglyceryl-10 Myristate (and) Propylene Glycol Caprylate (and) Glycerin (and) Thioctic Acid (and) Alcohol</i></p> <p>Japanese Patent No. 4849792</p>	<p>nutraceutical foods, foods, cosmetics, etc.</p>

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PRODUCTS PROFILE

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PRODUCTS	CHARACTERISTICS	APPLICATIONS
COCOA EXTRACT -P -WSP	COCOA EXTRACT-P is dark brown powder extracted from cocoa mass with aqueous ethanol. It contains more than 10% theobromine and 20% polyphenols. The extract exhibits weight loss. Theobromine inhibits fat accumulation and enhances lipolysis. The polyphenols enhance lipid consumption by enhancement of cytochrome-C oxidase. Acute toxicity: LD50 more than 2 g/kg Repeated oral toxicity (28 days): negative Clastogenicity: negative WSP is water-soluble powder which can be used for beverages <i>etc.</i>	nutraceutical foods, foods, <i>etc.</i>
COCOA EXTRACT -PC -WSPC -LC	Cocoa extract for cosmetics use. It exhibits anti-oxidative activity by polyphenols. It is useful for sliming aids and anti-cellulite. LC is liquid type. COCOA EXTRACT-PC <i>INCI name: Theobroma Cacao (Cocoa) Extract</i> COCOA EXTRACT-WSPC <i>INCI name: Dextrin (and) Theobroma Cacao (Cocoa) Extract</i> COCOA EXTRACT-LC <i>INCI name: Butyrene Glycol (and) Water (and) Theobroma Cacao (Cocoa) Extract</i>	cosmetics
ORYZA TRITERPENOID -C	ORYZA TRITERPENOID is sterol mixture purified from rice germ. It reduces serum cholesterols and triglyceride after fat ingestion. Type C is powder for cosmetics. Acute toxicity: LD50 more than 2 g/kg Ames test: negative	nutraceutical foods, cosmetics, <i>etc.</i>
KIWI SEED EXTRACT -P -WSP	Yellowish-brown powder extracted from kiwi seeds. These products contain more than 2% polyphenols and 5 mg/100g of quercitrin. They are effective for acnes and reduce wrinkle, melanogenesis and dark pigmentation under eyes. WSP is water-soluble powder. Synergistic clinical data with Oryza Ceramide is available Acute toxicity: LD50 more than 2 g/kg Ames test: negative -P, WSP: Halal authorized product Japanese Patent No. 5462430, 4925692	nutraceutical foods, foods, <i>etc.</i>
KIWI FRUIT OIL	Characteristic oil extracted from kiwi seed. It contains more than 55% α -linolenic acid and 40 mg/ 100 g of tocotrienols. Acute toxicity: LD50 more than 5 g/kg <i>INCI Name: Actinidia Chinensis (Kiwi) Seed Oil</i>	nutraceutical foods, foods, cosmetics, <i>etc.</i>

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PRODUCTS	CHARACTERISTICS	APPLICATIONS
KIWI SEED EXTRACT -PC -WSPC -LC	<p>KIWI SEED EXTRACT for cosmetics use. They suppress acnes and reduce wrinkles and dark pigmentation under eyes. They also exhibit whitening effects by inhibition of tyrosinase activities and melanogenesis. Type LC is a liquid.</p> <p>Acute toxicity: LD50 more than 2 g/kg</p> <p>KIWI SEED EXTRACT- PC Skin irritation: negative Patch test (human): negative Repeated skin irritation test: negative Eye irritation (HET-CAM test): slightly irritative <i>INCI Name: Dextrin (and) Actinidia Chinensis (Kiwi) Seed Extract</i></p> <p>KIWI SEED EXTRACT–WSPC <i>INCI Name: Dextrin (and) Actinidia Chinensis (Kiwi) Seed Extract</i></p> <p>KIWI SEED EXTRACT- LC <i>INCI Name: Butylene Glycol (and) Water (and) Actinidia Chinensis (Kiwi) Seed Extract</i> -PC: Halal authorized product</p>	cosmetics
ASTAXANTHIN -20 -5 -LS1 -P1 -20C -5C -LSC1 -PC1	<p>Astaxanthin-20, -20C, -5 and -5C are red oil extracted from <i>Haematococcus pluvialis</i>. They guarantee minimum of 20.0 % astaxanthin for -20 and -20C, and 5.0% for -5 and -5C. LS1 and LSC1 are water-soluble liquid. P1 and PC1 are powder type. These products exhibit potent anti-oxidative and anti-inflammatory effects and inhibit arteriosclerosis. They also prevent cerebral ischemia, asthenopia and visual fatigue. They are effective for wrinkle care and improvement of skin elasticity.</p> <p>-20: Acute toxicity: LD50 more than 2 g/kg-20C: Patch test (human): negative</p> <p>ASTAXANTHIN-20C <i>INCI Name: Haematococcus Pluvialis Extract</i></p> <p>ASTAXANTHIN-5C <i>INCI Name: Caprylic/Capric Triglyceride (and) Haematococcus Pluvialis Extract (and) Tocopherol</i></p> <p>ASTAXANTHIN-LSC1 <i>INCI Name: Glycerin (and) Water (and) Polyglyceryl-10 Oleate (and) Caprylic/Capric Triglyceride (and)Haematococcus Pluvialis Extract (and) Polyglyceryl-10 Stearate (and) Lysolecithin (and) Tocopherol</i></p> <p>ASTAXANTHIN-PC1 <i>INCI Name: Cyclodextrin (and) Caprylic/Capric Triglyceride (and) Haematococcus Pluvialis Extract (and) Tocopherol</i></p>	nutraceutical foods, foods, cosmetics, etc.

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ORYZA OIL & FAT CHEMICAL CO., LTD.

PRODUCTS	CHARACTERISTICS	APPLICATIONS
RED GINGER EXTRACT -P -WSP	<p>Yellowish brown powder extracted from red ginger. The extracts contain more than 6% (WSP: 3.0%) [6]-gingerol and [6]-shogaol and more than 1.5% (WSP: 0.5%) tannins. 3R,5S-[6]-gingerdiol is characteristic constituents in red ginger. The extracts exhibit anti-arthritis and anti-inflammatory activities. Synergistic effect with glucosamine has confirmed. WSP is water-soluble powder.</p> <p>Acute oral toxicity: LD50 more than 2 g/kg Repeated oral toxicity (28 days): negative Ames test: negative</p> <p>US patent: 8017162 Japanese Patent No. 5303697</p>	nutraceutical foods, foods, cosmetics
RED GINGER EXTRACT -PC -WSPC -LC	<p>RED GINGER EXTRACT for cosmetics. The products can be used for anti-aging cosmetics. LC is liquid type.</p> <p>Ames test: negative Skin irritation(EpiSkin): negative Eye irritation (EpiOcular): negative</p> <p>RED GINGER EXTRACT-PC ECOCERT-registered product <i>INCI Name: Zingiber Officinale (Ginger) Rhizome Extract (and) Cyclodextrin</i></p> <p>RED GINGER EXTRACT-WSPC <i>INCI Name: Cyclodextrin (and) Zingiber Officinale (Ginger) Rhizome Extract</i></p> <p>RED GINGER EXTRACT-LC <i>INCI Name: Butylene Glycol (and) Water (and) Zingiber Officinale (Ginger) Rhizome Extract</i></p>	cosmetics
WALNUT POLYPHENOL -P10 -P30 -WSP10	<p>Light Yellow to dark brown powder extracted from walnut seed skin. The extracts contain more than 10% (P30: 30%) polyphenols and more than 0.1% (P30: 0.3%) tellimagrandin I. They are suitable for hepatoprotection, metabolic syndrome and pigmentation. WSP10 is water-soluble powder.</p> <p>Acute toxicity: LD50 more than 2 g /kg Human ingestion: No toxicity</p>	nutraceutical foods, foods, etc.
WALNUT POLYPHENOL -PC10 -PC30 -WSPC10 -LC	<p>Walnut polyphenol for cosmetics. The products can be used for anti-oxidative cosmetics. LC is liquid type.</p> <p>WALNUT POLYPHENOL-PC10 and -WSPC10 <i>INCI Name: Dextrin (and) Juglans Regia (Walnut) Seedcoat Extract</i></p> <p>WALNUT POLYPHENOL-PC30 <i>INCI Name: Juglans Regia (Walnut) Seedcoat Extract (and) Dextrin</i></p> <p>WALNUT POLYPHENOL-LC <i>INCI Name: Butylene Glycol (and) Water (and) Juglans Regia (Walnut) Seedcoat Extract</i></p>	cosmetics

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PRODUCTS PROFILE

ORYZA OIL & FAT CHEMICAL CO., LTD.

PRODUCTS	CHARACTERISTICS	APPLICATIONS
WALNUT SEED OIL (Post ordered production)	Seed oil extracted from walnut seeds. <i>INCI Name: Juglans Regia (Walnut) Seed Oil</i>	nutraceutical foods, foods, cosmetics, <i>etc.</i>
CHINESE CHIVE SEED EXTRACT -P -WSP	Light yellowish powder extracted from Chinese chive seeds. It contains more than 0.1% <i>S</i> -allyl- <i>L</i> -cysteine. The extract improves vitality, sexual potency, fatigue, aging, waist pain, periphery coldness, urine leakage and thaururia. It also suppresses melanogenesis. WSP is water-soluble and applicable to beverages. Acute toxicity: LD50 more than 2 g/kg Ames test: negative Japanese Patent No. 4925671	nutraceutical foods, foods, <i>etc.</i>
CHINESE CHIVE SEED EXTRACT -PC -WSPC -LC	For cosmetic use. LC type is liquid and easy to use. CHINESE CHIVE SEED EXTRACT–PC and –WSPC <i>INCI Name: Dextrin (and) Allium Tuberosum Seed Extract</i> CHINESE CHIVE SEED EXTRACT-LC <i>INCI Name: Butylene Glycol (and) Water (and) Allium Tuberosum Seed Extract</i>	cosmetics
CHINESE CHIVE SEED OIL (Post ordered production)	Seed oil extracted from Chinese chive seeds. Acute toxicity: LD50 more than 5 g/kg	nutraceutical foods, foods, cosmetics, <i>etc.</i>
RESVERATROL -P5 -WSP0.5	Purple powder extracted from grape skin, seeds, and leaves. Resveratrol have been reported many biological activities. Outstanding ingredient for anti-oxidative and anti-ageing. An article in <i>Nature</i> reported in 2006 that resveratrol exhibited life elongation in high fat diet-fed mice. It also assists sliming and is helpful for metabolic syndrome. Its anti-aging effect was confirmed in SAMP10 mice. Acute toxicity: LD50 more than 2 g/kg RESVERATROL-P5 contains more than 25% polyphenol and 5% resveratrol with ORAC value: 14,000 μmol TE/g. Repeated oral toxicity: negative Micronucleus test: negative RESVERATROL-WSP0.5 is water-soluble powder containing more than 2.5% polyphenol and 0.5% resveratrol.	nutraceutical foods, foods, <i>etc.</i>
RESVERATROL -PC5 -WSPC0.5	RESVERATROL for cosmetics. The products protect skin from UV ray and oxidative stresses. They also suppress inflammation, pigmentation and bacterial infection such as <i>acnes</i> . They exhibit hyaluronidase, collagenase and elastase activities. RESVERATROL–PC5 <i>INCI Name: Vitis Vinifera (Grape) Leaf/Seed/Skin Extract (and) Resveratrol</i> RESVERATROL –WSPC0.5 <i>INCI Name: Maltosyl Cyclodextrin (and) Cyclodextrin (and) Dimaltosyl Cyclodextrin (and) Maltose (and) Vitis Vinifera (Grape) Leaf/Seed/Skin Extract (and) Resveratrol</i>	cosmetics

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PRODUCTS PROFILE

ORYZA OIL & FAT CHEMICAL CO., LTD.

PRODUCTS	CHARACTERISTICS	APPLICATIONS
<p>CISTANCHE TUBULOSA EXTRACT</p> <p>-P25</p> <p>-PC25</p>	<p><i>Cistanche tubulosa</i> is a parasitic plant on tamarisk roots. <i>C. tubulosa</i> is cultivated in the Takla Makan desert in China and is used for tonic. The extract improves brain function (learning ability, memory and ischemia) and is helpful for vitality, aphrodisiac potency, anti-fatigue, anti-ageing, hair growth and immune systems. It also inhibits collagenase activity. The products are quite water-soluble and contain more than 25% echinacoside and 5% acteoside. The contents of phenylethanoids (more than 50%) are highest among other provider's products.</p> <p>Acute toxicity: LD50 more than 26.4 g/kg</p> <p>Ames test: negative</p> <p>Micronucleus test: negative</p> <p>Teratogenicity: negative</p> <p>Repeated oral toxicity (30 and 180 days): negative</p> <p><i>INCI Name: Cistanche Tubulosa Root Extract</i></p> <p>Certified Organic Plants</p> <p>CISTANCHE TUBULOSA EXTRACT-PC25</p> <p><i>INCI Name: Cistanche Tubulosa Root Extract</i></p>	<p>nutraceutical foods, foods, cosmetics, etc.</p>
<p>RED RICE EXTRACT</p> <p>-P</p> <p>-WSP</p>	<p>Pale brown to red brown powder extracted from red rice bran. The extracts contain more than 5% (WSP: 1%) polyphenol. They are suitable for anti-hypercholesterolemia, anti-hypertriglyceridemia and antioxidative. WSP is water-soluble.</p> <p>Acute toxicity: LD50 more than 1 g/kg</p> <p>Ames test: negative, Human ingestion: No toxicity</p>	<p>nutraceutical foods, foods, etc.</p>
<p>RED RICE EXTRACT</p> <p>-PC</p> <p>-WSPC</p> <p>-LC</p>	<p>Powders for cosmetic use (PC, WSPC). LC is liquid form.</p> <p>RED RICE EXTRACT –PC</p> <p><i>INCI Name: Dextrin (and) Oryza Sativa (Rice) Bran Extract</i></p> <p>RED RICE EXTRACT –WSPC</p> <p><i>INCI Name: Maltosyl Cyclodextrin (and) Cyclodextrin (and) (and) Dimaltosyl Cyclodextrin (and) Maltose (and) Oryza Sativa (Rice) Bran Extract</i></p> <p>RED RICE EXTRACT –LC</p> <p><i>INCI Name: Water (and) Butylene Glycol (and) Oryza Sativa (Rice) Bran Extract</i></p>	<p>cosmetics</p>

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PRODUCTS	CHARACTERISTICS	APPLICATIONS
WHITE JELLY FUNGUS EXTRACT -P -PC	<p>White to light yellow powder extracted from mushroom, a fruit body of <i>Tremella fuciformis</i>. The product contains 10 to 30% glucuronic acids and more than 80% white jelly fungus polysaccharide. It is suitable for sliming (suppression of appetite, inhibition of fat accumulation and enhancement of fat metabolism. It also reliefs constipation by improvement of intestinal flora and maintains skin moisture. The solution is clear and high viscosity.</p> <p>Acute toxicity: LD50 more than 1 g/kg Repeated oral toxicity (30 days): negative Ames test: negative Teratogenicity: negative, Human ingestion: No toxicity</p> <p>Japanese Patent No. 5525700</p>	nutraceutical foods, foods, etc.
STRAWBERRY SEED EXTRACT -P	<p>Pale yellowish brown powder extracted from strawberry seed. It contains more than 2.5% polyphenol and 0.5% tiliroside. It exhibits excellent anti-obese effect, beautifying effect, ceramide increasing and barrier fortifying effects. Tiliroside enhances mRNA expression of factors involved in production of ceramide and hyaluronan. The extract enhances mRNA expression of aquaporins, and suppresses melanogenic enzymes.</p> <p>Acute toxicity: LD50 more than 2 g/kg Ames test: negative</p> <p>Halal authorized product Japanese Patent No.5996156</p>	nutraceutical foods, foods, etc.
STRAWBERRY SEED EXTRACT -PC -LC	<p>Water-soluble powder for cosmetic use (PC). LC is liquid type. -PC: Halal authorized product</p> <p>STRAWBERRY SEED EXTRACT –PC <i>INCI Name: Dextrin (and) Fragaria Ananassa (Strawberry) Seed Extract</i></p> <p>STRAWBERRY SEED EXTRACT –LC <i>INCI Name: Butylene Glycol (and) Fragaria Ananassa (Strawberry) Seed Extract</i></p>	cosmetics
STRAWBERRY SEED OIL (Post ordered production)	<p><i>INCI Name: Fragaria Ananassa (Strawberry) Seed Oil</i></p>	nutraceutical foods and cosmetic
LINGONBERRY EXTRACT -J -PJ -PJC -LC	<p>LINGONBERRY EXTRACT-J Lingonberry juice with brix 65 squeezed from wild lingonberry grown in northern Europe. It improves blood circulation.</p> <p>LINGONBERRY EXTRACT-PJ Brilliant pink water-soluble powder with good sour taste. The product is made from LINGONBERRY EXTRACT-J.</p> <p>LINGONBERRY EXTRACT–PJC Cosmetic version of PJ. <i>INCI Name: Vaccinium Vitis-ideae Fruit Juice (and) Alpha Glucan</i></p> <p>LINGONBERRY EXTRACT–LC Liquid form for cosmetics. <i>INCI Name: Water (and) Butylene Glycol (and) Vaccinium Vitis-ideae Fruit Juice</i></p>	foods and nutraceutical foods, cosmetics, etc.

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PRODUCTS PROFILE

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PRODUCTS	CHARACTERISTICS	APPLICATIONS
LINGONBERRY EXTRACT -P0.5 -PC0.5	<p>Pink water-soluble powder from lingonberry fruits in Finland. It contains more than 0.5% arbutin and exhibits whitening effect. Expected for anti-pigmentation, whitening, <i>etc.</i></p> <p>LINGONBERRY EXTRACT-P0.5 Acute toxicity: LD50 more than 2 g/kg Ames test: negative</p> <p>LINGONBERRY EXTRACT-PC0.5 <i>INCI Name: Dextrin (and) Vaccinium Vitis-ideae Fruit Extract</i></p> <p>Japanese Patent No. 5525716</p>	foods and nutra- ceutical foods, cosmetics, <i>etc.</i>
FUcoxANTHIN -5KW -1KW -P1KW -WSP0.1KW	<p>Fucoxanthin is a carotenoid containing sea algae such as <i>Laminaria</i> and <i>Undaria species</i>. FUcoxANTHIN is extracted and purified from <i>Laminaria japonica</i> (Kombu) which has been eaten for thousands of years in Japan and East Asia. It exhibits anti-obesity effect based on enhancement of UCP-1 expression. We confirmed anti-obesity effect on clinical study. It also suppresses melanogenesis and acne.</p> <p>Acute toxicity: LD50 more than 2 g/kg Repeated oral toxicity (90 days): negative for diet containing 4% Kombu extract Micronucleus test: negative (2 g/kg)</p> <p>Type-5KW and 1KW are oil containing more than 5 and 1% fucoxanthin. P1KW is orange powder containing more than 1% fucoxanthin. WSP0.1KW is water-soluble powder.</p>	foods and nutra- ceutical foods, <i>etc.</i>
FUcoxANTHIN -5CKW -1CKW -PC1KW -WSPC0.1KW	<p>FUcoxANTHIN series for cosmetics. They exhibit anti-pigmentation or whitening effects.</p> <p>FUcoxANTHIN-5CKW and -1CKW <i>INCI Name: Caprylic/Caplic Triglyceride (and) Laminaria Japonica Extract (and) Fucoxanthin (and) Tocopherol</i></p> <p>FUcoxANTHIN-PC1KW <i>INCI Name: Cyclodextrin (and) Caprylic/Caplic Triglyceride (and) Tocopherol (and) Laminaria Japonica Extract (and) Fucoxanthin</i></p> <p>FUcoxANTHIN -WSPC0.1KW <i>INCI Name: Maltosyl Cyclodextrin (and) Cyclodextrin (and) (and) Dimaltosyl Cyclodextrin (and) Maltose (and) Caprylic/Caplic Triglyceride (and) Tocopherol (and) Laminaria Japonica Extract (and) Fucoxanthin</i></p>	cosmetics

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ORYZA OIL & FAT CHEMICAL CO., LTD.

PRODUCTS	CHARACTERISTICS	APPLICATIONS
<p>ORYZA PROTEIN[®] -P70 -PC70</p>	<p>Rice-derived protein powder containing more than 70% protein. Allergen-free, non-GMO and non-BSE, which may be concerned in soy, wheat or milk proteins. Highest digestion ratio (ease of digestion) among other plant-derived proteins. Natural and strong emulsifier.</p> <p>The product is expected for weight control, build-up of muscles, cholesterol lowering, <i>etc.</i> No binder and melamine.</p> <p>Acute toxicity: LD50 more than 2 g/kg ORYZA PROTEIN[®] –PC70 <i>INCI Name: ORYZA SATIVA (RICE) BRAN EXTRACT</i> -PC70: COSMOS-certified product</p>	<p>foods and nutritional foods, natural allergen-free emulsifier, cosmetics, <i>etc.</i></p>
<p>ORYZA PEPTIDE -P60 -PC60</p>	<p>Rice-derived peptide powder containing more than 60% peptide. The main peptides are tripeptides. It is produced by enzymatic digestion from ORYZA PROTEIN. Following effects are expected. Weight control, build-up of muscles, anti-pigmentation, whitening, moisturizing, anti-wrinkle, <i>etc.</i> Water-soluble. No binder. Clinical data for weight loss is available.</p> <p>Acute toxicity: LD50 more than 5 g/kg ORYZA PEPTIDE –PC60 <i>INCI Name: HYDROLYZED RICE BRAN EXTRACT</i> -PC60: COSMOS-certified product</p>	<p>foods and nutritional foods, cosmetics, <i>etc.</i></p>
<p>SAKURA EXTRACT -P -PC -LC</p> <p>SAKURA SYRUP</p>	<p><i>Sakura</i> (cherry blossom) flowers are symbol of Japan. SAKURA EXTRACT is pale pink powder extracted from Sakura flower. It exhibits anti-glycative, whitening and collagen productive effects. Recently the extract was found to prevent diabetic retinopathy.</p> <p>Acute toxicity: LD50 more than 2 g/kg Repeated oral toxicity (28 days): negative Ames test: negative, Skin irritation (EpiSkin): negative Eye irritation (HCE): negative, Patch test (human): negative Repeated skin irritation test: negative Sensitization (RIPT method): negative</p> <p>SAKURA EXTRACT–P contains more than 2.0% caffeoyl glucose and 0.5% quercetin glucoside as active ingredients. Water soluble.</p> <p>SAKURA SYRUP is syrup for foods. SAKURA EXTRACT–PC <i>INCI Name: Dextrin (and) Prunus Lannesiana Flower Extract (and) Ascorbic Acid (and) Malic Acid</i> SAKURA EXTRACT–LC <i>INCI Name: Water (and) Butylene Glycol (and) Prunus Lannesiana Flower Extract (and) Ascorbic Acid (and) Malic Acid</i></p> <p>-P, -PC: Halal authorized product Japanese Patent No. 5878023, 5792844, 5783784 Chinese Patent No. ZL201180007852.8 US Patent No.9381223</p>	<p>foods and nutritional foods, cosmetics, <i>etc.</i></p>

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PRODUCTS	CHARACTERISTICS	APPLICATIONS
<p>COPRINO[®] POWDER -C</p> <p>COPRINO[®] EXTRACT -P0.5 -PC0.5 -LC</p>	<p>Coprino[®], <i>Coprinus comatus</i>, is a variety of edible white mushroom. The mushroom has been regarded and consumed as high quality food due to limited production. We discovered that <i>C. comatus</i> is the richest source of ergothioneine, a naturally-occurring amino acid with strong antioxidant activity. COPRINO[®] EXTRACT-P0.5, -PC0.5, -LC are water soluble.</p> <p>Acute toxicity: LD50 more than 2 g/kg Ames test: negative Skin irritation (EpiSkin method): negative Eye irritation (BCOP method): negative</p> <p>COPRINO[®] POWDER-C <i>INCI Name: Coprinus Comatus (Mushroom) Powder</i></p> <p>COPRINO[®] EXTRACT -PC0.5 <i>INCI Name: Coprinus Comatus (Mushroom) Extract (and) Dextrin</i></p> <p>COPRINO[®] EXTRACT -LC <i>INCI Name: Water (and) Butylene Glycol (and) Coprinus Comatus (Mushroom) Extract</i></p>	<p>foods and nutraceutical foods, cosmetics, etc.</p>
<p>POLYAMINE -P</p>	<p>Pale yellow powder extracted from wheat germ. It contains more than 0.15% polyamines including spermine, spermidine and putrescine.</p> <p>It enhances nail and hair growth. The extract enhances production of keratin 1 and 16.</p> <p>Acute toxicity: LD50 more than 2 g/kg Ames test: negative</p> <p>Japanese Patent No. 5877980</p>	<p>nutraceutical foods and foods</p>
<p>ORYZA POLYAMINE -P</p> <p>ORYZA POLYAMINE -LC (BG30)</p>	<p>Pale yellow powder extracted from rice germ. It contains more than 0.2% polyamines including spermine, spermidine and putrescine.</p> <p>It enhances hair growth and cuticle repair action. The extract anti-aging with various functionality, such as activity to suppress glycation reaction and suppress aging of skin.</p> <p>Acute toxicity: LD50 more than 2 g/kg Ames test: negative Skin irritation (EpiSkin method): negative Eye irritation (EpiOcular method): negative</p> <p>ORYZA POLYAMINE-LC <i>INCI Name: Water (and) Butylene Glycol (and) Oryza Sativa (Rice) Extract (and) Citric Acid</i></p> <p>Japanese Patent No. 6192036</p>	<p>foods and nutraceutical foods, cosmetics, etc.</p>

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ORYZA OIL & FAT CHEMICAL CO., LTD.

PRODUCTS	CHARACTERISTICS	APPLICATIONS
MaquiBright™ (MAQUI BERRY EXTRACT) -P35 -J	<p>MAQUI BERRY EXTRACT-P35 is a water extract from Maqui berry, a fruit of <i>Aristotelia chilensis</i>. This product contains more than 35% of total anthocyanins.</p> <p>MAQUI BERRY EXTRACT-J is a concentrated juice of Maqui berry (65% Brix).</p> <p>We confirmed effects on eye disease prevention, hair growth, anti-photo aging, anti-oxidant, anti-inflammatory, anti-obesity and arteriosclerosis prevention.</p> <p>Acute toxicity: LD50 more than 2 g/kg Ames test: negative Repeated oral toxicity (90 days): negative</p>	foods and nutra- ceutical foods, etc.
MAQUI BERRY EXTRACT -PC35 -LC	<p>MAQUI BERRY EXTRACT series for cosmetics. They exhibit hair growth, anti-photo aging, anti-oxidant, anti-inflammatory effects. Eye irritation (EpiOcular method): negative</p> <p>MAQUI BERRY EXTRACT-PC35 <i>INCI Name: Aristotelia Chilensis Fruit Extract</i></p> <p>MAQUI BERRY EXTRACT-LC <i>INCI Name: Water (and) Butylene Glycol (and) Aristotelia Chilensis Fruit Extract</i></p> <p>Japanese patent No. 6144536</p>	cosmetics
BLACK GINGER EXTRACT -P -WSP	<p>BLACK GINGER EXTRACT is extracted with aqueous ethanol from the rhizome of <i>Kaempferia parviflora</i> (<i>Zingiberaceae</i>) indigenous to Thailand. It exhibits many pharmacological effects such as promotion of blood circulation, improvement of the shape of capillary blood vessels and lowering blood pressure. It also improves cold feeling in the hands and feet, swelling, erectile dysfunction with the same mechanism as Viagra, metabolic syndrome (anti-obesity, anti-diabetes), allergy, inflammation and brain function, etc..</p> <p>Acute toxicity: LD50 more than 2000 mg/kg Ames test: negative Repeated oral toxicity (28 days): negative Chronic toxicity: No evident toxic phenomena were observed at doses of 5, 50 and 500 mg/kg in rat for 6 months oral administration.</p> <p>Japanese Patent No.6086953</p>	foods and nutra- ceutical foods, etc.

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PRODUCTS PROFILE

ORYZA OIL & FAT CHEMICAL CO., LTD.

PRODUCTS	CHARACTERISTICS	APPLICATIONS
BLACK GINGER EXTRACT -PC -WSPC -LC	<p>For cosmetic use. LC type is liquid and easy to use. Referring to the above functions.</p> <p>Ames test: negative Skin irritation (EpiDerm method): very mild irritation Eye irritation (CAMVA method): negative Eye irritation (BCOP method): very mild irritation Repeated skin irritation (HRIPT method): negative</p> <p>BLACK GINGER EXTRACT-PC <i>INCI Name: Sodium Starch Octenylsuccinate (and) Kaempferia Parviflora Rhizome Extract</i></p> <p>BLACK GINGER EXTRACT-WSPC <i>INCI Name: Maltosyl Cyclodextrin (and) Cyclodextrin (and) Dimaltosyl Cyclodextrin (and) Maltose (and) Kaempferia Parviflora Rhizome Extract</i></p> <p>BLACK GINGER EXTRACT-LC <i>INCI Name: Propanediol (and) Water (and) Kaempferia Parviflora Rhizome Extract</i></p>	cosmetics
WATERSHIELD EXTRACT -P -WSP	<p>WATERSHIELD EXTRACT is extracted with aqueous ethanol from the leaves of watershield (<i>Braseria shreberi</i>) cultivated in Akita prefecture in Japan. Type P (powder) and WSP (water-soluble powder) are standardized polyphenols, polysaccharides and junsainoside A (a novel compound). The extract exhibits fat reducing, slimming, improving intestinal flora, reducing cellulite, anti-oxidative and promoting hyaluronan and collagen production.</p> <p>Acute toxicity: LD50 more than 2000 mg/kg Ames test: negative</p> <p>-P, WSP: Halal authorized product Japanese Patent No.6075025, 6198463</p>	foods and nutraceutical foods, etc.
WATERSHIELD EXTRACT -PC -WSPC -LC	<p>For cosmetic use. LC type is liquid and easy to use. Referring to the above functions.</p> <p>Ames test: negative Skin irritation (EpiDerm method): very mild irritation Eye irritation (CAMVA method): negative Eye irritation (BCOP method): very mild irritation Repeated skin irritation (HRIPT method): negative</p> <p>-PC, WSPC: Halal authorized product</p> <p>WATERSHIELD EXTRACT-PC <i>INCI Name: Sodium Starch Octenylsuccinate (and) Bresenia Schreberi Leaf Extract</i></p> <p>WATERSHIELD EXTRACT-WSPC <i>INCI Name: Sodium Starch Octenylsuccinate (and) Bresenia Schreberi Leaf Extract</i></p> <p>WATERSHIELD EXTRACT-LC <i>INCI Name: Propanediol (and) Water (and) Bresenia Schreberi Leaf Extract</i></p>	cosmetics

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PRODUCTS PROFILE

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PRODUCTS	CHARACTERISTICS	APPLICATIONS
BIRD'S NEST EXTRACT -P	BIRD'S NEST EXTRACT-P is water-soluble powder extracted from the nests of Collocalini by high pressure enzymatic technique. It is standardized more than 1.5% sialic acid. The extract exhibits EGF-like activity, wound healing effect and improvement of tight junctions. As bird's nest extract Acute toxicity: LD50 more than 2000 mg/kg Ames test: negative	foods and nutra- ceutical foods, etc.
BIRD'S NEST EXTRACT -PC -LC	For cosmetic use. LC type is liquid and easy to use. Referring to the above functions. Skin irritation (EpiSkin method): negative Eye irritation (EpiOcular method): negative BIRD'S NEST EXTRACT-PC <i>INCI Name: Dextrin (and) Hydrolyzed Swiftlet Nest</i> Patch test: negative BIRD'S NEST EXTRACT-LC <i>INCI Name: Water (and) Propanediol (and) Hydrolyzed Swiftlet Nest</i>	cosmetics
PURPLE TEA EXTRACT -P -WSP -WSPS -WSPD	PURPLE TEA EXTRACT-P is water-soluble powder extracted with aqueous ethanol from the leaves of purple tea (<i>Camellia sinensis</i>). It is standardized more than 30% polyphenols and more than 3% GHG*. The extract exhibits anti-obesity, anti-oxidative, anti-aging of skin and skin whitening effect. *1,2-di-Galloyl-4,6-hexahydroxydiphenoyl-β-D-glucose Acute toxicity: LD50 more than 2000 mg/kg Ames test: negative -P: Halal authorized product Japanese patent No. 6227851	foods and nutra- ceutical foods, etc.
PURPLE TEA EXTRACT -PC -WSPC -LC	For cosmetic use. LC type is liquid and easy to use. Referring to the above functions. Ames test: negative Skin irritation (EpiDerm method): negative Skin irritation (EpiSkin method): negative -PC: Halal authorized product PURPLE TEA EXTRACT-PC <i>INCI Name: Camellia Sinensis Leaf Extract (and) Dextrin (and) Citric Acid</i> PURPLE TEA EXTRACT-LC <i>INCI Name: Water (and) Butylene Glycol (and) Camellia Sinensis Leaf Extract</i>	cosmetics

PRODUCTS PROFILE

ORYZA OIL & FAT CHEMICAL CO., LTD.

PRODUCTS	CHARACTERISTICS	APPLICATIONS
KIKU FLOWER EXTRACT -P -WSP	<p>KIKU FLOWER EXTRACT is extracted with aqueous ethanol from bud of <i>Chrysanthemum morifolium</i> and refined to have high luteolin content. It has been confirmed to possess anti-gout effect through inhibition of xanthine oxidase to reduce the production of uric acid. It has also been proved to increase fibronectin and type 4 collagen, the constituents of the extracellular matrix to form the basal membrane of the skin. It is expected to protect and repair the basal membrane from UV irradiation and oxidative stress to exhibit skincare effect for anti-wrinkle and anti-ageing.</p> <p>Acute toxicity: LD50 more than 2000 mg/kg in mice Ames test: negative</p>	foods and nutra- ceutical foods, etc.
KIKU FLOWER EXTRACT -PC -WSPC -LC	<p>For cosmetic use. LC type is liquid and easy to use. Referring to the above functions.</p> <p>Ames test: negative Skin irritation (EpiSkin method): negative Eye irritation (HCE method): negative Phototoxicity (3T3-NR method): negative</p> <p>-PC <i>INCI Name: Chrysanthemum Morifolium Flower Extract (and) Dextrin</i></p> <p>-WSPC <i>INCI Name: Maltosyl Cyclodextrin (and) Cyclodextrin (and) Dimaltosyl Cyclodextrin (and) Maltose (and) Chrysanthemum Morifolium Flower Extract</i></p> <p>-LC <i>INCI Name: Water (and) Propanediol (and) Chrysanthemum Morifolium Flower Extract</i></p>	cosmetics
SEABERRY EXTRACT -P -WSP -J (build to order)	<p>SEABERRY EXTRACT is extracted with aqueous ethanol from a fruit of <i>Hippophae rhamnoides</i>. Type P is a powder with pale brown to brown color and Type WSP is a water soluble powder with pale yellow to pale brown color. Type P contains not less than 0.2% of triterpenic acids 0.2% isorhamnetin rhamnoside. The products possess functions of improvement of BPH, inhibition of overactive bladder, inhibitory effects on skin irritation of air pollutants and dryness, anti-oxidative effect, wound healing effect.</p> <p>Acute toxicity: LD50 more than 2000 mg/kg in mice Ames test: negative</p>	foods and nutra- ceutical foods, etc.

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PRODUCTS PROFILE

ORYZA OIL & FAT CHEMICAL CO., LTD.

PRODUCTS	CHARACTERISTICS	APPLICATIONS
SEABERRY EXTRACT -PC -WSPC	<p>For cosmetics use. The products possess functions same as the previous section except for urinary dysfunctions.</p> <p>Ames test: negative Skin irritation (EpiSkin method): negative</p> <p>-PC <i>INCI Name: Hippophae Rhamnoides Fruit Extract (and) Maltodextrin</i></p> <p>-WSPC <i>INCI Name: Hippophae Rhamnoides Fruit Extract (and) Maltodextrin</i></p>	cosmetics
SEABERRY FRUIT OIL	<p>SEBERRY FRUIT OIL is extracted and refined from a fruit of <i>Hippophae rhamnoides</i>. It contains palmitoleic acids more than 30%. It possesses the functions for improvement of benign prostatic hyperplasia, melanogenesis and metabolic syndromes.</p> <p>Acute toxicity: LD50 more than 2000 mg/kg in mice Ames test: negative Skin irritation (EpiSkin method): negative</p>	foods and nutraceutical foods, etc.
PASSIONFLOWER EXTRACT -P -WSP	<p>PASSIONFLOWER EXTRACT is extracted with aqueous ethanol from aerial part of <i>Passiflora incarnata</i>. Type P is a powder of pale yellowish brown to yellowish brown color and type WSP is a water soluble powder with pale yellow to pale brown color. Type P contains more than 3.0% of total flavonoids and type WSP contains more than 1.0% of total flavonoids. The products improve life rhythm and quality of sleep by adjusting clock cycle.</p> <p>Agricultural residue: less than criteria for 532 pesticides Acute toxicity: LD50 more than 2000 mg/kg in mice Ames test: negative Micro nucleus test: negative Comet assay: negative</p>	foods and nutraceutical foods, etc.

PRODUCTS PROFILE

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PRODUCTS	CHARACTERISTICS	APPLICATIONS
PASSIONFLOWER EXTRACT -PC -WSPC	<p>For cosmetics use. The products enhance expression of clock genes, developing factors for cornified envelope (involucrin and filaggrin) and endothelin.</p> <p>Ames test: negative Skin irritation (EpiSkin method): negative</p> <p>-PC <i>INCI Name: Passiflora Incarnata Extract (and) Maltodextrin (and) Silica</i></p> <p>-WSPC <i>INCI Name: Passiflora Incarnata (and) Maltodextrin</i></p>	cosmetics
FucoRex™ -5 -1	<p>FucoRex™ is extracted and purified from <i>Phaeodactylum tricornutum</i>. It exhibits anti-obesity effect based on enhancement of UCP-1 expression. We confirmed anti-obesity effect on clinical study. It also suppresses melanogenesis and acne. -5 contains more than 5.0% fucoxanthin and -1 contains more than 1.0% of fucoxanthin.</p> <p>Acute toxicity: LD50 more than 1000 mg/kg in mice Ames test: negative</p>	foods and nutraceutical foods, etc
AGUAJE EXTRACT -(oil) -P -L AGUAJE POWDER (Post-ordered production)	<p>AGUAJE EXTRACT is an oil extracted from fruit of <i>Mauritia flexuosa</i>. The extracts contain Lespeflorin G8, which acts as a phytoestrogen.. It is expected to maintain estrogen balance.</p> <p>Type P contains more than 30% aguaje oil. Type L is liquid form (emulsion) of aguaje extract, which is soluble in water and contains more than 30% aguaje oil. Powder is manufactured from fruits by grinding and drying.</p> <p>Acute toxicity: LD50 is more than 2000 mg/kg in mice. Ames test: negative</p>	nutraceutical foods, foods, etc
AGUAJE FRUIT OIL -(oil) -PC -LC	<p>AGUAJE FRUIT OIL series for cosmetics.</p> <p>Ames test: negative</p> <p>-(oil) <i>INCI Name: Mauritia Flexuosa Fruit Oil (and) Tocopherol</i></p> <p>-PC <i>INCI Name :Maltodextrin (and) Mauritia Flexuosa Fruit Oil (and) Acacia Senegal Gum (and) Tocopherol</i></p> <p>-LC <i>INCI Name : Water (and) Mauritia Flexuosa Fruit Oil (and) Glycerin (and) Polyglyceryl-10 Oleate</i></p>	cosmetics

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ORYZA OIL & FAT CHEMICAL CO., LTD.

PRODUCTS	CHARACTERISTICS	APPLICATIONS
<p>ISADA OIL (KRILL OIL) (Post-ordered production)</p> <p>ISADA OIL -P (Post-ordered production)</p>	<p>ISADA oil is an oil prepared from <i>Euphausia pacifica</i> from the east coast of Japan. 8-hydroxyeicosapentaenoic acid (8-HEPE) contained in ISADA oil can enhance the activity of peroxisome proliferator-activated receptor (PPAR) α, δ, γ. It is expected to improve the obesity.</p> <p>ISADA oil contains more than 0.15% 8-HEPE. Type P is the powder containing 30% ISADA oil.</p>	<p>nutraceutical foods, foods, <i>etc</i></p>
<p>TOMATO SEED EXTRACT -P</p>	<p>TOMATO SEED EXTRACT is extracted from seed of <i>Solanum lycopersicum</i>. Type P is powder which contains lycoperosides (Saponin which is especially included in tomato seed).</p> <p>The product has the maintenance of extracellular matrix (ECM) condition effect in skin by promotion of collagen and elastin production effects and by promotion of the ECM degradation products removal effect. Based on these effects, the product prevents skin from wrinkle and improves elasticity.</p>	<p>nutraceutical foods, foods, <i>etc</i></p>



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