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Sustainability



As part of the world's largest producer of Certified Sustainable Palm Oil (CSPO), and founding member of the Roundtable on Sustainable Palm Oil (RSPO), SD Guthrie International plays a leading role in the development and promotion of sustainable practices in the palm oil sector.

With an extensive global network in 11 countries, SD Guthrie International seeks to advance the production, procurement and use of sustainable oil palm products in line with the Group's promise of Delivering Sustainable Futures. Our approach is in line with the United Nations Sustainable Development Goals (UN SDGs). We actively engage with our wide range of stakeholders and work closely with our business partners who are also committed to sustainability to help us achieve our targets for sustainable development. In the spirit of continuous improvement, we welcome feedback and dialogue at all times.

SD Guthrie International adheres to the Group's three charters that outline our commitments to responsible agriculture practices, human rights, as well as innovation and productivity, and resonates with our promise of Delivering Sustainable Futures.

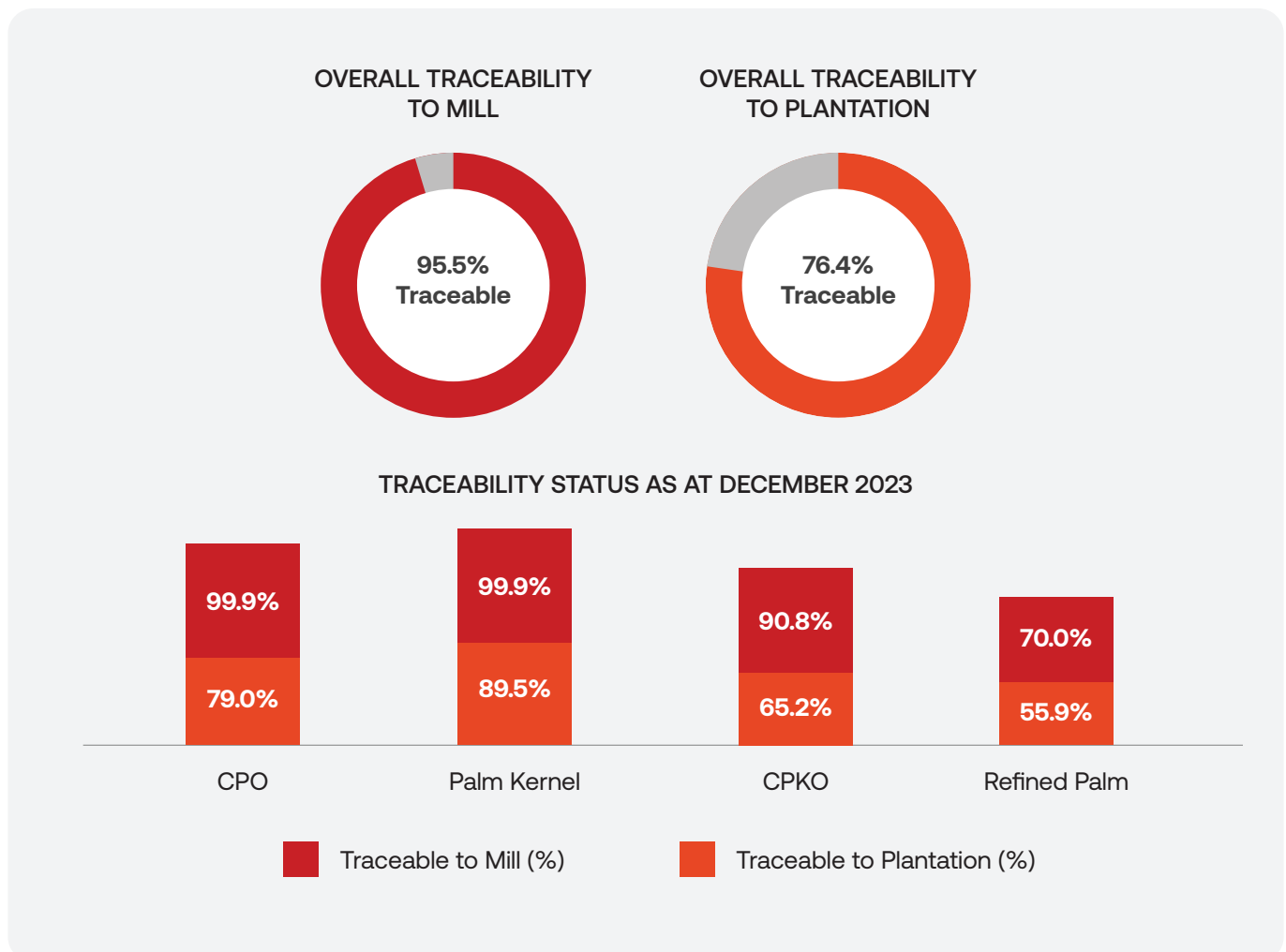
The Responsible Agriculture Charter outlines the Company's commitment to further improve agriculture practices through responsible environmental, social and governance practices.

The Human Rights Charter enshrines the Company's commitment in respecting human rights in line with the United Nations Guiding principles on Business and Human Rights.

The Innovation & Productivity Charter states the Company's aspirations across the value chain in achieving prosperity with high levels of productivity, through engagement with the Company's counterparties and business partners, for sustainable development.

Supply Chain Management

SD Guthrie International is committed to a traceable and sustainable supply chain. We provide transparency on our supply chain and progress towards implementing our No Deforestation, No Peat and No Exploitation (NDPE) commitments.

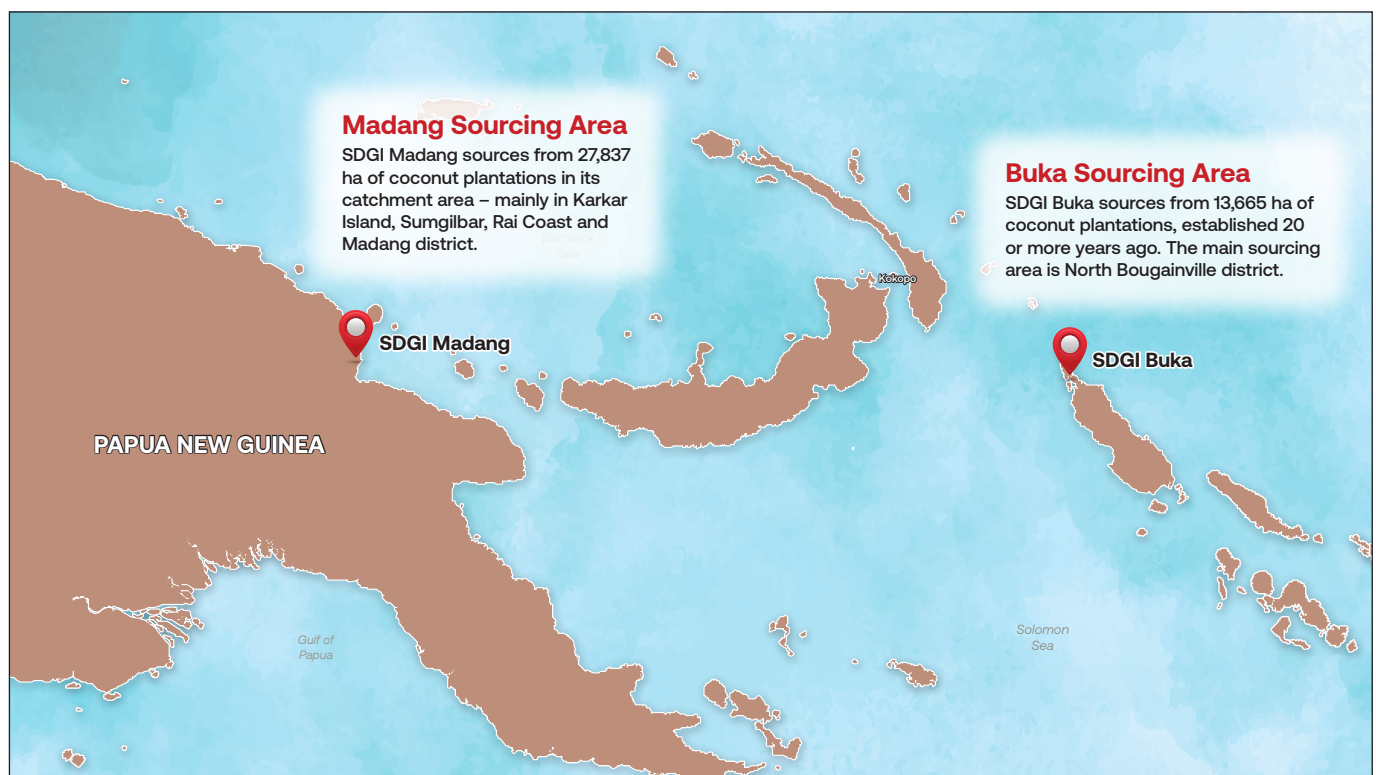


Single Source Coconut Origin from Papua New Guinea



The wide usage of coconut in the cosmetic, food and beverage, and pharmaceutical industries has driven rapid growth of the global coconut market. The demand is outpacing supply; consumers and buyers both seek sustainably sourced coconut products. There are tremendous market potential but also significant production challenges for sustainable coconut. 95% of global coconut is harvested by smallholders. With experience in supporting palm oil smallholders, we are confident that there are opportunities to make positive contribution for coconut farmers in pursuit of livelihood improvements.

As a company committed to advancing sustainability, we rigorously monitor the origins of our supply chain to proactively identify and address environmental and social risks. Leveraging our extensive expertise and networks within the palm oil industry, we are applying our insights to gain a comprehensive understanding of our coconut supply base. SDGI has conducted detailed mapping of coconut plantations to enhance our knowledge of sourcing areas and assess potential sustainability impacts, particularly for our SDGI Madang and Buka copra crushing mills.



Our focus areas in responsibly sourcing coconut:

1. Enhance supply chain traceability.
2. Improve smallholder farmers' income and livelihoods.
3. Support improvement of farming practices and product quality.





BAKERY SHORTENING

Product Description

Premium quality shortening made from a fully refined palm oil and texturised to impart good plasticity, smooth consistency to facilitate mixing and ease of use at ambient temperature.

Applications

Bakery shortening is a type of fat used in the production of bakery products to achieve desired texture, volume, and mouthfeel. It serves multiple functions in baking and can be used in various applications.

The shortening is widely used on applications such as Cream crackers, biscuits, cookies, cakes, pie pastry, bread, cream filling in biscuits and wafers and other bakery products.

Packing

20kg/18kg/16kg carton.

Storage

It is recommended to be stored in a cool and dry place, away from direct sunlight and odoriferous materials.

Shelf-Life

One year from the manufacturing date in original, unopened packaging without mishandling.

Technical Specifications	Shortening 3639	Shortening 3943	Shortening 4044	Shortening 4649	Dough Fat 4851
Free Fatty Acid (% as palmitic)	0.1 Max	0.1 Max	0.1 Max	0.1 Max	0.1 Max
Peroxide Value (meq/kg)	1.0 Max at Packing	1.0 Max at Packing	1.0 Max at Packing	1.0 Max at Packing	1.0 Max at Packing
Moisture & Impurities (%)	0.1 Max	0.1 Max	0.1 Max	0.1 Max	0.1 Max
Slip Melting Point (° C)	36 – 39	39 – 43	40 – 44	46 – 49	48 – 51
Colour (5 ¼" Lovibond)	3R + 30Y Max	3R + 30Y Max	3R + 30Y Max	3R + 30Y Max	3R + 30Y Max
Iodine Value (Wijs)	50 – 55	47 – 51	44 – 51	43 – 46	41 – 46



BAKERY SHORTENING

Product Description

KEMBAKE SHORTENING AP is made from fully refined vegetable oils and fats. It is a non-hydrogenated texturized fats of non-lauric origin.

Applications

It is a bakery fat for the preparation of cream crackers, biscuits, cookies, cakes, pie pastries, bread, and other bakery products. It can also be used for the preparation of cream filling in biscuits and wafers and is suitable for continuous industrial frying.

Characteristics

It is texturized to impart good plasticity and ease of use at ambient temperature.

Packing

In 16kg, 20kg or 25kg carton.

Storage

It is recommended to be stored in a cool and dry place, away from direct sunlight and odoriferous materials.

Shelf-Life

One year from date of manufacture in original and sealed packaging.

Technical Specifications	AP 35	AP38	AP 40	AP 49	Solid Fat Content (%) using IUPAC Method 2.150(a):			
Free Fatty Acid (% as palmitic)	0.1 Max	0.1 Max	0.1 Max	0.1 Max	Technical Specifications	AP 35	AP38	AP 40
Moisture & Impurities (%)	0.1 Max	0.1 Max	0.1 Max	0.15 Max	20°C	20 - 30	25 - 35	27 - 37
Iodine Value (Wijs)	45 - 55	45 - 54	42 - 52	48 Max	30°C	7 - 14	7 - 15	10 - 18
Saponification Value	-	190 - 205	190 - 205	190 - 205	40°C	4 Max	2 - 8	2 - 10
Slip Melting Point (° C)	35 - 39	36 - 39	39 - 42	48 - 52	45°C	-	3 Max	5 Max
Colour (5 .25" Lovibond Cell)	3R + 30Y Max	3R + 30Y Max	3R + 30Y Max	3.0R + 30Y Max				



BUTTER OIL SUBSTITUTES

Product Description

KEMBOS is a high quality specialty fat designed to replace butter oil. It is made from 100% freshly and fully refined vegetable oil and fractions.

Applications

KEMBOS is ideal for use as a dough fat for producing high quality biscuits and cookies. It can also be used for the preparation of confectionery cream and toffee.

It is also very suitable for coffee processors who incorporate butter oil and butter oil substitutes into roasted coffee beans for achieving buttery aroma and shine in the end products.

Characteristics

It is fully texturised with excellent consistency, smoothness and soft texture. The product is enriched with heat-stable buttery flavours with superb baked-through effect. The end product made using **KEMBOS** has a pleasant buttery aroma. It is low in melting point, moisture-free and golden yellow in colour.

KEMBOS represents great value as an alternative with performance levels on par with butter oil.

Packing

In bulk, ISO-tanker, 190kg steel drum, 17kg tin, 18kg tin, 20kg carton.

Storage

It is recommended to be stored in a cool and dry place, away from direct sunlight and odoriferous materials.

Shelf-Life

One year from date of manufacture in original and sealed packaging.

Technical Specifications	KEMBOS 33
Free Fatty Acid (% as palmitic)	0.15 Max
Moisture & Impurities (%)	0.1 Max
Iodine Value (Wijs)	44- 52
Slip Melting Point (° C)	31 - 35
Colour	Golden Yellow

Solid Fat Content (%) using IUPAC Method 2.150(a):	
Technical Specifications	KEMBOS 33
10°C	52 Max
20°C	12 - 20
30°C	3 - 10
35°C	5 Max

KEMPUFF SUPREME KP

CROISSANT SHEET MARGARINE



Product Description

KEMPUFF SUPREME KP is a high quality Croissant Sheet Margarine made from fully refined vegetable oils and fats.

Applications

It is soft pastry margarine specially designed for the preparation of Croissants, Danish and Puff Pastries.

Characteristics

It is specially processed from high quality vegetable oils and fats to give a smooth and plastic texture over a wide range of temperatures.

It is golden yellow in color and enriched with high quality butter flavours.

It has excellent plasticity, soft texture and perfect consistency. In its pre-cut sheet form, the margarine is convenient and easy to use during lamination process. **KEMPUFF SUPREME KP** gives very well-defined and distinguishable layers to the finished dough.

During baking process, its unique formulation enables the dough to easily expand with good amount of moisture trapped within the multiple layers. Thus, the baked products are light, flaky and tender in texture with superb volume. Enriched with heat stable buttery flavours, **KEMPUFF SUPREME KP** gives a pleasant buttery aroma to the final baked products.

Packing

It is packed in 20kg cartons. The margarine is sliced into 5kg sheets or slabs. All sheets or slabs are individually wrapped in plastic wrappers.

Storage

It is recommended to be stored in a cool and dry place, away from direct sunlight and odoriferous materials.

Shelf-Life

Nine months from date of manufacture in original and sealed packaging.

Technical Specifications

KP39

Free Fatty Acid (% as palmitic)	0.15 Max
Moisture & Impurities (%)	18 Max
Colour	Golden Yellow
Salt (%)	1 Max
Water (%)	18 Max
Fat Blend (%)	80 Min
Slip Melting Point (° C)	38 – 42

Solid Fat Content (%) using IUPAC Method 2.150(a):

Technical Specifications	KP39
20°C	36 - 42
25°C	20 - 28
30°C	12 - 18
35°C	5 - 12
40°C	3 - 8
45°C	3 Max

CAKE & CREAM MARGARINE



Product Description

KEMBAKE MARGARINE IM is made from fully refined vegetable oils and fats.

Applications

It is an Industrial Margarine most suitable for use in the preparation of cakes and cookies. It can also be used for coffee roasting and in the preparation of confectioners' cream and toffee.

Characteristics

It is specially formulated and texturised to give good creaming properties over a wide range of temperatures. It does not oil out on exposure to normal storage temperatures of up to 40°C.

The crumbs structure of cookies made using **KEMBAKE MARGARINE IM** is even and fine which gives a good crunchy bite feel to the cookies.

The high quality bakery fat is also suitable for the preparation of cake as it gives good volume and makes the crusts turn golden in a uniform manner. The crumb structure of the cakes are small and uniform, thus holding the cake volume and imparting a light, tender and slightly moist mouth feel.

Packing

In 16kg, 18kg and 20kg carton.

Storage

It is recommended to be stored in a cool and dry place, away from direct sunlight and odoriferous materials.

Shelf-Life

Nine months from date of manufacture in original and sealed packaging.

Technical Specifications	IM 39	IM 39 LT
Free Fatty Acid (% as palmitic)	0.15 Max	0.15 Max
Colour	Golden Yellow	Golden Yellow
Salt (%)	3 Max	3 Max
Water (%)	16 Max	16 Max
Fat Blend (%)	80 Min	80 Min
Slip Melting Point (° C)	39 - 41	37 - 41
Trans Fatty Acids (%)	-	1 max



MARGARINE & BUTTER BLEND

Product Description

KEMBAKE MARGARINE & BUTTER BLEND BX is produced from fully refined vegetable oils and fats with a delicate blend of milk fat to produce an ideal alternative to pure butter.

Applications

It is specially designed for use in the preparation of butter cakes and cookies. It can also be used for the preparation of confectionery cream and toffee.

Characteristics

It is specially formulated and texturised to give exceedingly smooth and soft texture. It provides superb creaming properties over a wide range of temperature. The bakery products made using **KEMBAKE BX** have strong buttery aroma and taste similar to the use of pure butter.

Packing

In 16kg, 18kg and 20kg carton.

Storage

It is recommended to be stored in chilled conditions of temperature between 5 to 15 degrees Celsius and away from odoriferous materials.

Shelf-Life

Nine months from date of manufacture in original and sealed packaging.

Technical Specifications	BX 60
Free Fatty Acid (% as palmitic)	0.15 Max
Moisture & Impurities (%)	16 Max
Iodine Value (Wijs)	38 - 46
Slip Melting Point (°C)	31 - 35
Colour (Lovibond 5.25" cell)	Golden Yellow
Salt Content (%)	3 Max
Water Content (%)	16 Max
Fat Blend (%)	80 min

Solid Fat Content (%) using IUPAC Method 2.150(a):	
Technical Specifications	BX 60
10°C	55 Max
20°C	18 - 28
30°C	4 - 12
35°C	6 Max



PUFF PASTRY SHEET MARGARINE

Product Description

KEMPUFF KP is a premium quality Puff Pastry Sheet Margarine made from fully refined vegetable oils and fats.

Applications

It is specially formulated for the preparation of puff pastry products such as pies, Danish and croissants.

Characteristics

It is specially processed from high quality vegetable oils and fats to give a smooth and plastic texture over a wide range of temperatures.

It is yellowish in color and enriched with high quality butter flavours.

It has excellent plasticity. In its pre-cut sheet form, the margarine is easy to handle during rolling and folding process. **KEMPUFF KP** gives regular and well-separated layers to the finished dough.

Puff pastries made using **KEMPUFF KP** come out of the oven light, flaky with a golden crispy crust and fine soft crumb. Enriched with heat stable buttery flavours, it gives a pleasant buttery aroma to the final baked products.

Packing

Packed in 20kg cartons. The margarine is sliced into 5kg sheets or slabs. All sheets or slabs are individually wrapped in plastic wrappers.

Storage

It is recommended to be stored in a cool and dry place, away from direct sunlight and odoriferous materials.

Shelf-Life

Nine months from date of manufacture in original and sealed packaging.

Technical Specifications	KP43	KP46
Free Fatty Acid (% as palmitic)	0.15 Max	0.15 Max
Moisture & Impurities (%)	20 Max	16 Max
Colour	Golden Yellow	Golden Yellow
Salt (%)	2 Max	3 Max
Water (%)	16 Max	20 Max
Fat Blend (%)	80 Min	80 Min
Slip Melting Point (°C)	42 - 46	46 - 49
Iodine Value (Wijs)	-	36 - 45



PASTRY MARGARINE

Product Description

KEMKRISP KR is a high quality pastry margarine made from fully refined vegetable oil and fats.

Applications

It is specially designed for large scale production of frozen paratha and frozen dough.

It is also suitable for the preparation of crispy curry puff, puff and flaky pastries.

Characteristics

KEMKRISP KR is specially formulated and texturised to give good plasticity.

It has well delicate balance and consistent texture which is not too hard nor too soft, an important attribute for machine handling.

It has good texture which enables easy dough lamination, smooth and gives good layering effect, and mildly flavoured with a pleasant sweet buttery aroma.

Packing

It is packed in 15 or 20kg cartons.

Storage

It is recommended to be stored in a cool and dry place, away from direct sunlight and odoriferous materials.

Shelf-Life

Nine months from date of manufacture in original and sealed packaging.

Technical Specifications	KR43
Free Fatty Acid (%)	0.15 Max
Moisture & Impurities (%)	14 - 16
Colour	Light Yellow
Salt (%)	2.5 Max
Water (%)	16 Max
Fat Blend (%)	80 Min
Slip Melting Point (°C)	42 - 45

KEMCREAM KM30 (HCNO)



CREAMING FAT

Product Description

A high quality lauric based filling fat made from hydrogenated and fully refined coconut oil. It has an excellent melting down and a cooling sensation in the mouth. It shows high stability against oxidation and is free from active lipases.

Applications

KEMCREAM KM30 is recommended for use as filling or centers for biscuits, wafers and other confectioneries. It is also well-suited for substituting milk fat in ice cream mixes, caramels, and toffees.

Packing

In Bulk, 180kg or 190kg Steel Drum, 17kg or 18kg tin, 25kg or 20kg Carton.

Storage

Recommended to be stored in a cool, dry, odour free area and away from sunlight with ambient temperature not above 30°C.

Shelf-Life

12 months from the date of manufacture in original and unopened packing (carton, tin) condition.

KM 30-001

Parameters	Specifications
Free Fatty Acid (% as Lauric)	0.1 Max
Moisture & Impurities (%)	0.1 Max
Iodine Value (Wijs)	2 Max
Slip Melting Point (° C)	29 – 32
Colour (Lovibond 5.25" cell)	1R + 10Y Max
Solid Fat Content (NMR) (%)	
20° C	50 – 60
25° C	12 – 20
30° C	6 Max
35° C	3 Max

KM 30-002

Parameters	Specifications
Free Fatty Acid (% as Lauric)	0.1 Max
Moisture & Impurities (%)	0.1 Max
Iodine Value (Wijs)	2 Max
Slip Melting Point (° C)	30 – 34
Colour (5.25" Lovibond Cell)	1R + 10Y Max
Solid Fat Content (NMR) (%)	
20° C	55 – 65
25° C	20 – 30
30° C	5 – 10
35° C	5 Max



FILLING FATS

Product Description

KEMCREAM KM is a high quality lauric based filling fat made from hydrogenated and fully refined vegetable fats.

Applications

It is specially formulated for use in fillings or centres for biscuits, wafers and other confectioneries. It is also suitable for use as a milk fat replacer in ice cream mix, caramels and toffees.

Characteristics

KEMCREAM KM has an excellent meltdown giving a cooling sensation in the mouth. It shows high stability against oxidation and is free from active lipases.

Packing

In bulk, ISO-tanker, Paper IBC, 190kg steel drum, 17kg tin, 18kg tin, 20kg bag-in-box.

Storage

It is recommended to be stored in a cool and dry place, away from direct sunlight and odoriferous materials.

Shelf-Life

One year from date of manufacture in original and sealed packaging.

Technical Specifications	KM 24	KM 29
Free Fatty Acid (% as Lauric)	0.1 Max	0.1 Max
Moisture & Impurities (%)	0.1 Max	0.1 Max
Iodine Value	7.5 - 10.5	-
Slip Melting Point (°C)	22 - 27	26 - 31
Colour (Lovibond 5.25" cell)	1.5R+15Y Max	2R+20Y Max

Solid Fat Content (%) using IUPAC Method 2.150(a):

Technical Specifications	KM 29
20° C	47 - 53
25° C	15 - 21
30° C	4 - 8
35° C	4 Max
40° C	-



FILLING FATS

Product Description

KEMCREAM KM is a high quality lauric and palm based filling fat made from hydrogenated and fully refined vegetable oils and fractions.

Applications

It is specially formulated for use in fillings or centres for biscuits, wafers and other confectioneries. It is also suitable for use as a milk fat replacer in ice cream mix, caramels and toffees.

Characteristics

KEMCREAM KM has an excellent meltdown giving a cooling sensation in the mouth. It shows high stability against oxidation and is free from active lipases.

Packing

In bulk, ISO-tanker, Paper IBC, 190kg steel drum, 17kg tin, 18kg tin, 20kg bag-in-box.

Storage

It is recommended to be stored in a cool and dry place, away from direct sunlight and odoriferous materials.

Shelf-Life

One year from date of manufacture in original and sealed packaging.

Technical Specifications	KM 35
Free Fatty Acid (% as Lauric)	0.1 Max
Moisture & Impurities (%)	0.1 Max
Iodine Value	29 - 35
Slip Melting Point (°C)	34 - 38
Colour (Lovibond 5.25" cell)	3R+30Y Max

Solid Fat Content (%) using IUPAC Method 2.150(a):

Technical Specifications	KM 35
20° C	25 - 35
25° C	-
30° C	8 - 14
35° C	4 - 9
40° C	4 Max



COCOA BUTTER SUBSTITUTES

Product Description

KEMCOA KC is a superior quality cocoa butter substitute made from hydrogenated and fully refined vegetable oil and fractions.

Applications

KEMCOA KC series are formulated to replace cocoa butter for compound chocolate confectioneries. They are suitable for moulding, couvertures, solid, and enrobing applications.

Compound chocolate made using **KEMCOA KC** has excellent mouth feel, gloss, melting properties and good resistance against fat bloom. Compound chocolate prepared using **KEMCOA KC** forms stable crystals on rapid cooling without tempering.

These fats have low compatibility with cocoa butter. Therefore, it is recommended to use low-fat cocoa powder in the recipe.

Characteristics

It has an excellent sharp melting profile.

Packing

In bulk, ISO-tanker, 190kg steel drum, 1MT, 25kg or 20kg carton.

Storage

It is recommended to be stored in a cool and dry place, away from direct sunlight and odoriferous materials.

Shelf-Life

One year from date of manufacture in original and sealed packaging.

Technical Specifications	KC35	KC38
Free Fatty Acid (% as Lauric)	0.1 Max	0.1 Max
Moisture & Impurities (%)	0.1 Max	0.1 Max
Iodine Value (Wijs)	1.5 Max	1.5 Max
Slip Melting Point (°C)	34.5 - 36.5	39 - 41
Colour (Lovibond 5.25" cell)	1R+10Y Max	1.5R+15Y Max

Solid Fat Content (%) using IUPAC Method 2.150(a):

Technical Specifications	KC35	KC38
20° C	90 Min	90 Min
25° C	80 - 90	81 min
30° C	40 - 50	45 - 55
35° C	6 Max	7 - 12
40° C	1 Max	5 Max



CHOCOLATE SPREAD AND FILLING

Product Description

KEMSPREAD KD is a soft confectionery fat made from palm oil and its fractions.

Applications

It is specially formulated for the preparation of compound chocolate spread, soft centre filling and bakeable soft filling in biscuits and extruded snacks.

Characteristics

The compound chocolate spread or filling made using **KEMSPREAD KD** has excellent mouth feel and no waxy taste. The product remains soft at a wide temperature range and after baking. It is also stable and does not oil out during storage.

Packing

In 190kg steel drum or 20kg bag-in-box.

Storage

It is recommended to be stored in a cool and dry place, away from direct sunlight and odoriferous materials.

Shelf-Life

One year from date of manufacture in original and sealed packaging.

Technical Specifications	KD630	KD620
Free Fatty Acid (% as Lauric)	0.1 Max	0.1 Max
Moisture & Impurities (%)	0.1 Max	0.1 Max
Iodine Value (Wijs)	58 Min	62 Min
Slip Melting Point (°C)	33 Max	19 Max
Colour (Lovibond 5.25" cell)	4.0R+40Y Max	4.0R+40Y Max

Solid Fat Content (%) using IUPAC Method 2.150(a):

Technical Specifications	KD630
10° C	22 Max
20° C	6 Max
25° C	4 Max
30° C	3 Max



COATING FATS CREAMING FATS

Product Description

KEMKOTE KK is a good quality confectionery fat made from hydrogenated and fully refined vegetable oils and fractions.

Applications

It is used as a cocoa butter substitute for the production of compound chocolate coatings in non-critical applications such as short-life coatings on bakery products.

It is recommended for use in fillings or centers for biscuits and confectionery, chocolate vermicelli and production of caramels and toffees. **KEMKOTE KK** can replace butterfat in non-dairy products such as coffee whiteners and whippable toppings. It is also suitable to be used as a milk fat replacer in ice-cream mix.

Characteristics

Confectionery coatings prepared using **KEMKOTE KK** form crystals on rapid cooling without tempering.

These fats have low compatibility with cocoa butter. Therefore, it is recommended to use low-fat cocoa powder in the recipe.

It is compatible with **KEMFAT CF** fats and can be blended in any proportion.

Packing

In bulk, ISO-tanker, 190kg steel drum, 17kg tin, 20kg carton.

Storage

It is recommended to be stored in a cool and dry place, away from direct sunlight and odoriferous materials.

Shelf-Life

One year from date of manufacture in original and sealed packaging.

Technical Specifications	KK28	KK32	KK35	KK38	KK41
Free Fatty Acid (% as Lauric)	0.1 Max	0.1 Max	0.1 Max	0.1 Max	0.1 Max
Moisture & Impurities (%)	0.1 Max	0.1 Max	0.1 Max	0.1 Max	0.1 Max
Iodine Value (Wijs)	10 - 15	-	5 - 10	4 - 8	4 Max
Slip Melting Point (°C)	26 - 30	31 - 34	34 - 37	36 - 39	39 - 42
Colour (Lovibond 5.25" cell)	2R+20Y Max	1R+10Y Max	1R+10Y Max	1R+10Y Max	1R+10Y Max

Solid Fat Content (%) using IUPAC Method 2.150(a):

Technical Specifications	KK28	KK32	KK35	KK38	KK41
20° C	42 - 52	55 - 70	65 - 75	70 Min	73 Min
25° C	12 - 22	30 - 45	38 - 48	45 - 55	50 - 65
30° C	2 - 9	8 - 18	15 - 22	22 - 30	27 - 35
35° C	3 Max	7 Max	10 Max	14 Max	10 - 17
40° C	-	-	3 Max	6 Max	9 Max



LOW TRANS COCOA BUTTER REPLACERS

Product Description

KEMCHOC CT is a high quality of low trans cocoa butter replacer specially processed from fully refined interesterified palm oil fractions and palm kernel oil.

Applications

KEMCHOC CT 38 LT is a low trans cocoa butter replacer for compound chocolate coating applications such as for biscuits, wafers, nougat, nuts and raisins.

It is also suitable for the manufacture of glazes, icings, caramels, toffees, fillings and cream centers in biscuits and chocolate confectionary.

Characteristics

It has a trans fat content of less than 1% which is much lower than a traditional CBR without compromising its functionality.

Chocolate coating prepared using **KEMCHOC CT** forms stable crystal on rapid cooling without tempering. These fats have moderate compatibility with cocoa butter.

Packing

In bulk, ISO-tanker, 190kg steel drum, 20kg or 25kg carton.

Storage

It is recommended to be stored in a cool and dry place, away from direct sunlight and odoriferous materials.

Shelf-Life

One year from date of manufacture in original and sealed packaging.

Technical Specifications	KEMCHOC CT38 LT
Free Fatty Acid (% as palmitic)	0.1 Max
Moisture & Impurities (%)	0.1 Max
Slip Melting Point (°C)	37 - 40
Colour (Lovibond 5.25" cell)	2.5R+25Y Max
Trans Fatty Acids (%)	1 Max

Solid Fat Content (%) using IUPAC Method 2.150(a):

Technical Specifications	KEMCHOC CT38 LT
20° C	70 Min
25° C	52 Min
30° C	34 Min
35° C	21 Max
40° C	4 - 7



NON-LAURIC COCOA BUTTER REPLACERS

Product Description

KEMFAT KF is a high quality non-lauric confectionery coating fat made from hydrogenated and fully refined vegetable oils and fractions.

Applications

KEMFAT KF 550 is used as a partial or total replacer of cocoa butter in compound chocolate coating for biscuits, wafers, nougats, nuts and raisins.

KEMFAT KF 440 is formulated for use in fillings or centers of biscuits and confectionery, and to produce caramels and toffees.

It may be used with oil-containing nuts without the risk of developing off-flavour.

Chocolate coating prepared using **KEMFAT KF** forms stable crystals on rapid cooling without tempering. These fats have moderate compatibility with cocoa butter.

Characteristics

It has excellent heat resistance and is specially formulated for warmer climates.

Non-lauric **KEMFAT KF** is not compatible with any of the lauric confectionery fats.

Packing

In bulk, ISO-tanker, 190kg steel drum, 25kg or 20kg carton.

Storage

It is recommended to be stored in a cool and dry place, away from direct sunlight and odoriferous materials.

Shelf-Life

One year from date of manufacture in original and sealed packaging.

Technical Specifications	KF440	KF550
Free Fatty Acid (% as palmitic)	0.1 Max	0.1 Max
Moisture & Impurities (%)	0.1 Max	0.1 Max
Iodine Value (Wijs)	40 - 54	50 - 60
Slip Melting Point (°C)	37 - 40	37 - 40
Colour (Lovibond 5.25" cell)	2R+20Y Max	2R+20Y Max

Solid Fat Content (%) using IUPAC Method 2.150(a):		
Technical Specifications	KF440	KF550
20° C	50 Min	70 Min
25° C	38 - 48	50 - 60
30° C	22 - 31	32 - 40
35° C	11 - 16	12 - 18
40° C	3 Max	3 Max



COATING FATS

Product Description

KEMFAT CF is a high quality lauric coating fat made from hydrogenated and fully refined vegetable oils and fractions.

Applications

KEMFAT CF is used as a total replacer of cocoa butter in compound chocolate coating for biscuits, wafers, nougats, nuts and raisins.

It is also suitable for the manufacture of glazes, icings, caramels, toffees, fillings and cream centers in biscuits and chocolate confectionery.

Compound chocolate prepared using **KEMFAT CF** forms stable crystals on rapid cooling without tempering. These fats have low compatibility with cocoa butter. Therefore, it is recommended to use low-fat cocoa powder in the recipe.

Characteristics

It has excellent heat resistance and is specially formulated for warmer climates.

It has excellent microbiological properties, shows good stability against oxidation and is free from active lipases.

It is compatible with **KEMKOTE KK** fats, and can be blended in any proportion.

Packing

In bulk, ISO-tanker, 190kg steel drum, 25kg or 20kg carton.

Storage

It is recommended to be stored in a cool and dry place, away from direct sunlight and odoriferous materials.

Shelf-Life

One year from date of manufacture in original and sealed packaging.

Technical Specifications	CF35	CF38	CF40
Free Fatty Acid (% as lauric)	0.1 Max	0.1 Max	0.1 Max
Moisture & Impurities (%)	0.1 Max	0.1 Max	0.1 Max
Iodine Value (Wijis)	9 Max	5 Max	4 Max
Slip Melting Point (°C)	33 - 37	36 - 40	38 - 42
Colour (Lovibond 5.25" cell)	1R+10Y Max	1R+10Y Max	1R+10Y Max

Solid Fat Content (%) using IUPAC Method 2.150(a):			
Technical Specifications	CF35	CF38	CF40
20° C	72 Min	78 Min	80 Min
25° C	50 - 60	58 - 68	60 - 70
30° C	16 - 26	26 - 33	30 - 38
35° C	4 - 9	7 - 12	10 - 16
40° C	3 Max	6 Max	8 Max



FILLING FATS

Product Description

KEMFILL FF is a high quality non-lauric based filling fat made from fully refined vegetable oils and fractions.

Applications

It is specially formulated for preparations of cream fillings in biscuits, wafers or other confectioneries.

It is also suitable to be used as milk fat replacer in ice-cream mix, caramel and toffee.

Characteristics

The cream filling made using **KEMFILL FF** is stable against oxidation, has a good melting profile and no waxy taste.

Packing

In bulk, ISO-tanker, 190kg steel drum, 25kg or 20kg carton.

Storage

It is recommended to be stored in a cool and dry place, away from direct sunlight and odoriferous materials.

Shelf-Life

One year from date of manufacture in original and sealed packaging.

Technical Specifications	FF 300	FF 310	KFL 358
Free Fatty Acid (% as palmitic)	0.1 Max	0.1 Max	0.1 Max
Moisture & Impurities (%)	0.1 Max	0.1 Max	0.1 Max
Iodine Value (Wijs)	-	39 - 46	-
Slip Melting Point (°C)	26 - 30	30 - 34	33 - 38
Colour (Lovibond 5.25" cell)	3R+30Y Max	2.5R+25Y Max	3.0R+30Y Max
Trans Fatty Acids (%)	-	-	1 Max

Solid Fat Content (%) using IUPAC Method 2.150(a):

Technical Specifications	FF 300	FF 310	KFL 358
10°C	-	-	58 min
20° C	20 Min	45 Min	28 - 38
25° C	-	17 - 27	-
30° C	3 Max	5 - 12	4 - 12
35° C	-	3 Max	8 Max



SOFT CONFECTIONERY FATS

Product Description

KEMCOOL KL is a soft confectionery fat made from fully refined vegetable oils and fractions.

Applications

KEMCOOL KL 26 is specially formulated for the preparation of compound chocolate coating for ice cream or other chilled confections.

Characteristics

KEMCOOL KL 26 produces a liquid compound chocolate coating of low viscosity which crystallizes rapidly upon contact with ice cream or other chilled confections.

Unlike coating prepared using cocoa butter which is brittle, the coating made from **KEMCOOL KL 26** is pliable and will not flake off easily. The coating has no waxy taste and will melt in the mouth with the ice cream, giving good flavour release and excellent mouth feel.

Packing

In bulk, ISO-tanker, 190kg steel drum, 17kg tin, 18kg tin or 20kg bag-in-box.

Storage

It is recommended to be stored in a cool and dry place, away from direct sunlight and odoriferous materials.

Shelf-Life

One year from date of manufacture in original and sealed packaging.

Technical Specifications	KL 26
Free Fatty Acid (%)	0.1 Max
Moisture & Impurities (%)	0.1 Max
Iodine Value	20 - 25
Slip Melting Point (°C)	22 - 27
Colour (Lovibond 5.25" cell)	1.5R+15Y Max

Solid Fat Content (%) using IUPAC Method 2.150(a):

Technical Specifications	KL 26
10° C	57 - 67
20° C	30 Max
25° C	2 Max
30° C	-



LOW TRANS SOFT CONFECTIONERY FAT

Product Description

A soft confectionery fat made from fully refined vegetable oils and fractions. It produces a liquid compound chocolate coating of low viscosity, which crystallizes rapidly on contact with ice cream or other chilled confections.

Applications

Suitable for compound chocolate coating for ice cream, chilled confections, uses as milk fat replacer in ice-cream mix and for cake toppings. It has a trans fat content of less than 1%.

Packing

In bulk, Iso- tanker, 190kg steel drum, 18kg tin or 20kg carton.

Storage

Product need to be stored in a cool, dry, odour free area and away from sunlight with ambient temperature not above 20°C.

Shelf-Life

12 months from the date of manufacture in original and unopened (carton and tin) packing condition.

Parameters	KL 250
Free Fatty Acid (% as lauric)	0.1 Max
Moisture & Impurities (%)	0.1 Max
Slip Melting Point (°C)	22 - 27
Colour (Lovibond 5.25" cell)	1.5R+15Y Max
Iodine Value (Wijs)	18 - 23
Trans Fatty Acids (%)	1 Max

Solid Fat Content (%) using IUPAC Method 2.150(a):

Technical Specifications	KL 250
10° C	61 - 71
20° C	23 - 33
25° C	7 Max
30° C	1 Max



KEMCHEESE KH

Product Description

KEMCHEESE KH350 and **KH299B** are hydrogenated and fully refined from palm kernel oil.

Applications

They are specially designed as one of the ingredients in manufacturing dairy and confectionery products.

KEMCHEESE KH can replace milk fat in both processed and analogue cheese.

Packing

In bulk, ISO-tanker, 190kg steel drum, 25kg or 20kg carton.

Storage

It is recommended to be stored in a cool and dry place, away from direct sunlight and odoriferous materials.

Shelf-Life

One year from date of manufacture in original and sealed packaging.

Technical Specifications	KH350	KH299B
Free Fatty Acid (% as lauric)	0.1 Max	0.1 Max
Moisture & Impurities (%)	0.1 Max	0.1 Max
Slip Melting Point (° C)	33 - 36	33 - 37
Colour (Lovibond 5.25" Cell)	1R + 10Y Max	1R + 10Y Max
Iodine Value (Wijs)	-	9 Max

Solid Fat Content (%) using IUPAC Method 2.150(a):		
Technical Specifications	KH350	KH299B
20°C	77 - 83	72 Min
25°C	56 - 62	50 - 60
30°C	25 - 31	16 - 26
35°C	5 Max	4 - 9
40°C	-	3 Max



CERTIO PREMIUM DAIRY FAT REPLACER

Product Description

Certio premium dairy fat replacer is a refined, bleached, and deodorized palm oil solution made from SD Guthrie's most premium quality crude palm oil.

Applications

It is an ideal dairy substitute as it is free from any foreign or rancid odours and is neutral in taste, allowing it to blend seamlessly with other ingredients and flavours. Its formulated melting profile provides the desired texture and mouth feel in food applications, especially in the production of ice cream, condensed milk, evaporated milk, yoghurt and beverages.

Characteristics

- Economical and healthier alternative
- Higher oil stability
- Neutral in taste
- Specially formulated melting profile provides desired texture and mouth feel to the end product

Packing

Flexi Tank, ISO Tank, IBC, Drums, 20kg/18kg/16kg carton, 20L jerry can, 17kg Tin.

Storage

It is recommended to be stored in a cool and dry place, away from direct sunlight and odoriferous materials.

Shelf-Life

One year from the manufacturing date in original, unopened packaging without mishandling.

Technical Specifications	Certio Palm Oil	Certio Olein IV56
Free Fatty Acid (% as palmitic)	0.05 Max	0.05 Max
Peroxide Value (meq/kg)	1.0 Max at Packing	1.0 Max at Packing
Moisture & Impurities (%)	0.05 Max	0.05 Max
Slip Melting Point (° C)	33 – 39	24 Max
Colour (Lovibond 5.25" cell)	1.5R + 15Y Max	1.5R + 15Y Max
Iodine Value (Wijs)	50 – 55	56 Min



DAIRY FAT REPLACER FOR CONDENSED AND EVAPORATED MILK & BEVERAGES APPLICATIONS

Product Description

These products are refined, bleached, and deodorized palm oil and palm fraction, sourced from non-lauric origins and processed without hydrogenation.

Applications

These products are intended to substitute milk fat in condensed and evaporated milk, and are also suitable as ingredients in ready-to-drink beverages.

Palm oil closely matches the melting profile of milk fat, making it an excellent choice for use in ice cream.

Packing

Packed in tin, jerry can, drum, IBC tank, flexibag, and ISO tank.

Storage

It is recommended to be stored in a cool and dry place, away from direct sunlight and odoriferous materials.

Shelf-Life

One year from the manufacturing date in original, unopened packaging without mishandling.

Technical Specifications	RBD Palm Oil	RBD Palm Olein IV 56
Free Fatty Acid (% as palmitic)	0.1 Max	0.1 Max
Moisture & Impurities (%)	0.1 Max	0.1 Max
Peroxide Value (meq/kg)	1.0 Max at Packing	1.0 Max at Packing
Slip Melting Point (° C)	33 – 39	24 Max
Colour (Lovibond 5.25" cell)	3R + 30Y Max	2.5R + 25Y Max
Iodine Value (Wijs)	50 – 55	56 - 60



SUPAFRY SF

Product Description

SUPAFRY SF is a fully refined palm oil and fraction of non-lauric origin. It is texturized to impart good plasticity and smooth consistency for ease of use at ambient temperature.

Applications

SUPAFRY SF is suitable for frying and baking applications.

As frying oils, they can be applied in industrial continuous or batch frying. They are excellent in deep or shallow frying of snack foods, instant noodles to poultries.

In baking industry, it can be used as pan release agent and spray oil for biscuits and crackers.

Characteristics

It has a bland taste and excellent stability for deep frying.

Packing

In bulk, ISO-tanker, 190kg steel drum, 20kg or 25kg carton.

Storage

It is recommended to be stored in a cool and dry place, away from direct sunlight and odoriferous materials.

Shelf-Life

One year from date of manufacture in original and sealed packaging.

Technical Specifications	SF 26	SF 36
Free Fatty Acid (% as palmitic)	0.1 Max	0.1 Max
Moisture & Impurities (%)	0.1 Max	0.1 Max
Iodine Value (Wijs)	56 min	48 - 55
Slip Melting Point (° C)	19 - 25	34 - 38
Colour (Lovibond 5.25" Cell)	3.0R + 30Y Max	3.0R + 30Y Max



FRYING OIL & FATS

Product Description

High-quality palm oil and palm fractions are produced from high-quality crude palm oil. The oil is refined, deodorized, and bleached to meet the customer's required specifications.

Applications

Ideal for all types of cooking, stir-frying, deep frying, sautéing and baking. Also can be used for beverages as dairy fat replacer. Recommended for deep frying of chicken, nuggets, noodles, doughnuts, snacks and chips as it has high stability towards oxidation.

Packing

Flexi Tank, ISO Tank, IBC, Drums, 20kg/18kg/16kg carton, 20L Jerry Can, 17kg tin.

Storage

It is recommended to be stored in a cool and dry place, away from direct sunlight and odoriferous materials.

Shelf-Life

One year from the manufacturing date in original, unopened packaging without mishandling.

Technical Specifications	RBD Palm Oil	RBD Olein IV56	RBD Frying Shortening 3639	RBD Frying Shortening 3943
Free Fatty Acid (% as palmitic)	0.1 Max	0.1 Max	0.1 Max	0.1 Max
Moisture & Impurities (%)	0.1 Max	0.1 Max	0.1 Max	0.1 Max
Peroxide Value (meq/kg)	1.0 Max at Packing	1.0 Max at Packing	1.0 Max at Packing	1.0 Max at Packing
Slip Melting Point (° C)	33 - 39	24 Max	36 - 39	39 - 43
Colour (Lovibond 5.25" cell)	3R + 30Y Max	3R + 30Y Max	3R + 30Y Max	3R + 30Y Max
Iodine Value (Wijs)	50 - 55	56 Min	50 - 55	47 - 51



CERTIO PREMIUM FRYING OIL

Product Description

Certio frying oil is a premium quality pourable frying oil made from superior quality refined, bleached, and deodorized palm oil, derived from carefully selected fruits handled with care throughout the milling process.

Applications

The oil's remarkably slow oxidation and polymerization rates delay the onset of rancidity in food. As such, it enables longer hours of crispiness and freshness in fast food and extends shelf life of chips and instant noodles by 3-5 months.

Ideal for all types of cooking, stir-frying, deep frying, sautéing and baking. Also can be used for beverages as dairy fat replacer. Recommended for deep frying of chicken, nuggets, noodles, doughnuts, snacks and chips as it has high stability towards oxidation.

Characteristics

- No hydrogenation
- Lower Colour than PORAM (1.5R)
- Lower FFA than PORAM (0.05%)
- Extra frying life, 20% more than standard grade frying oil (subject to the food items being fried)
- Cost saving due to less oil absorption
- Extended shelf life of end-product

Packing

Flexi Tank, ISO Tank, IBC, Drums, 20kg/18kg/16kg carton, 20L Jerry Can, 17kg tin.

Storage

It is recommended to be stored in a cool and dry place, away from direct sunlight and odoriferous materials.

Shelf-Life

One year from the manufacturing date in original, unopened packaging without mishandling.

Technical Specifications	Certio Palm Oil	Certio Olein IV56	Certio Frying Shortening 3639	Certio Frying Shortening 3943
Free Fatty Acid (% as palmitic)	0.05 Max	0.05 Max	0.05 Max	0.05 Max
Peroxide Value (meq/kg)	1.0 Max at Packing	1.0 Max at Packing	1.0 Max at Packing	1.0 Max at Packing
Moisture & Impurities (%)	0.05 Max	0.05 Max	0.05 Max	0.05 Max
Slip Melting Point (° C)	33 – 39	24 Max	36 – 39	39 – 43
Colour (Lovibond 5.25" cell)	1.5R + 15Y Max	1.5R + 15Y Max	1.5R + 15Y Max	1.5R + 15Y Max
Iodine Value (Wijs)	50 – 55	56 Min	50 – 55	47 – 51

CERTIO PREMIUM RED SUPER OLEIN

Product Description

It is a high quality refined red palm super olein. Its' superior golden-red colour resulted from the naturally high level of carotene content.

Applications

It contains high amounts of tocopherol and tocotrienol which are natural antioxidants that reduce the oxidation rate and extend the product's shelf life. It also helps food achieve the desired golden finish in a shorter frying time. Suitable for shallow frying, food colourant (margarine, mayonnaise, salad dressing), beta carotene enriched food, functional foods and nutraceutical products.

Characteristics

Natural Colorant

- As substitute for synthetic beta carotene colorant for margarine and other food products
- Natural colorant for hair dye products
- Clean label

Impressive Nutrient Profile

- Min 500ppm Carotenes
- Min 800ppm of Tocopherol and Tocotrienols
- Tocotrienols are 60 times more potent than commercial tocopherol

Packing

17kg tin, 190kg drum, 900kg IBC and ISO tank (20mt).

Storage

It is recommended to be stored in a cool and dry place, away from direct sunlight and odoriferous materials.

Shelf-Life

One year from the manufacturing date in original, unopened packaging without mishandling.

Technical Specifications	Certio Red Palm Olein
Free Fatty Acid (% as palmitic)	0.1 Max
Moisture & Impurities (%)	0.1 Max
Peroxide Value (meq/kg)	1.0 Max at Packing
Slip Melting Point (° C)	19 Max
Iodine Value (Wijs)	60 Min
Tocopherols & Tocotrienols	800ppm Min
Carotenes	500ppm Min



CERTIO PREMIUM INFANT FORMULA OIL

Product Description

Certio Premium Infant Formula Oils are premium quality refined and fractionated palm oil, derived from carefully selected fruits handled with care throughout the milling process.

Application

Compliant with the most stringent food regulations, it ensures high levels of safety and quality in infant foods. It can be tailor-made using various processing techniques to suit the desired requirements in achieving the optimum fatty acid composition in infant formula products.

Packing

Certio Premium Infant Formula IV 56: 17kg tin, 20L jerry can, Bag in Box-20L, Drum, IBC, Flexibag and ISO tank.
Certio Premium Infant Formula IV62: 17kg tin, 190kg drum, 900kg IBC and ISO tank (20mt).

Storage

It is recommended to be stored in a cool and dry place, away from direct sunlight and odoriferous materials.

Shelf-Life

One year from the manufacturing date in original, unopened packaging without mishandling.

Technical Specifications	Certio Premium Infant Formula IV56	Certio Premium Infant Formula IV62
Free Fatty Acid (%as palmitic)	0.1 Max	0.1 Max
Moisture & Impurities (%)	0.1 Max	0.1 Max
Peroxide Value (meq/kg)	1.0 Max at Packing	1.0 Max at Packing
Slip Melting Point (° C)	24 Max	15 Max
Colour (Lovibond 5.25" Cell)	3R + 30Y Max	3R + 30Y Max
Iodine Value (Wijs)	56 Min	60 - 65
3-MCPD (ppm)	0.35 - 0.50 Max	0.35 - 0.50 Max
GE (ppm)	0.10 - 0.30 Max	0.10 - 0.30 Max

Animal Fat Replacer

SPECIALTY ANIMAL FAT REPLACER (SaFAR)



Product Description

Premium quality **Specialty Animal Fat Replacer** is crafted from high-grade palm oil and palm fractions, which undergo a texturization process to ensure a smooth consistency, facilitating easy mixing at room temperature.

Application

Suitable in manufacturing of processed meat product such as chicken sausage, chicken frankfurters, salami, meat balls, nuggets and burger patties. Also can be used in bakery and frying application.

Packing

16kg, 20kg and 25kg carton.

Storage

It is recommended to be stored in a cool and dry place, away from direct sunlight and odoriferous materials.

Shelf-Life

One year from the manufacturing date in original, unopened packaging without mishandling.

Technical Specifications	Shortening SaFAR (Specialty Animal Fat Replacer)
Free Fatty Acid (%as palmitic)	0.1 Max
Moisture & Impurities (%)	0.1 Max
Peroxide Value (meq/kg)	1.0 Max at Packing
Slip Melting Point (° C)	40 - 45
Colour (Lovibond 5.25" Cell)	3R + 30Y Max
Iodine Value (Wijs)	45 - 49

Low 3-MCPD & GE Products



LOW 3-MCPD & GE PRODUCTS

Product Description

Low 3-MCPD & GE palm oil products are derived from premium-quality refined, bleached, and deodorized palm oils and palm fractions, meticulously processed to adhere to stringent quality and safety standards.

These advanced palm oils undergo rigorous purification to substantially lower levels of **3-MCPD and GE**, addressing significant concerns in the food industry regarding potential health risks associated with these contaminants.

Application

Ideal for various cooking techniques such as stir-frying, deep-frying, sautéing, and baking, this versatile oil can also serve as a dairy fat substitute in beverages. It is particularly well-suited for deep-frying foods due to its excellent resistance to oxidation.

With its low levels of **3-MCPD & GE**, it meets the standards required for infant products and other items where compliance with these contaminants is essential.

Packing

Flexi Tank, ISO Tank, IBC, Drums, 20kg/18kg/16kg carton, 20L Jerry Can, 17kg tin.

Storage

It is recommended to be stored in a cool and dry place, away from direct sunlight and odoriferous materials.

Shelf-Life

One year from the manufacturing date in original, unopened packaging without mishandling.

Technical Specifications	LMG Palm Oil	LMG Olein IV56	LMG Palm Olein IV62	LMG Shortening	LMG Dough Fat 40-44	Low GE Palm Oil	Low GE Palm Olein IV56
Free Fatty Acid (%as palmitic)	0.1 Max	0.1 Max	0.1 Max	0.1 Max	0.1 Max	0.1 Max	0.1 Max
Moisture & Impurities (%)	0.1 Max	0.1 Max	0.1 Max	0.1 Max	0.1 Max	0.1 Max	0.1 Max
Peroxide Value (meq/kg)	1.0 Max at Packing	1.0 Max at Packing	1.0 Max at Packing	1.0 Max at Packing	1.0 Max at Packing	1.0 Max at Packing	1.0 Max at Packing
Slip Melting Point (° C)	33 - 39	24 Max	19 Max	36 - 39	40 - 44	33 - 39	24 Max
Colour (Lovibond 5.25" Cell)	3R + 30Y Max	3R + 30Y Max	3R + 30Y Max	3R + 30Y Max	3R + 30Y Max	3R + 30Y Max	3R + 30Y Max
Iodine Value (Wijs)	50 - 55	56 Min	60 Min	50 - 55	44 - 51	50-55	56 Min
3-MCPD (ppm)	2.5 Max	2.5 Max	2.5 Max	2.5 Max	2.5 Max	-	-
GE (ppm)	1.0 Max	1.0 Max	1.0 Max	1.0 Max	1.0 Max	1.0 Max	1.0 Max

Low MOSH, MOAH, 3-MCPD & GE Products



LOW MOSH, MOAH, 3-MCPD & GE PRODUCTS

Product Description

Low MOSH, MOAH, 3-MCPD & GE palm oil products are derived from premium-quality refined, bleached, and deodorized palm oils and palm fractions, meticulously processed to adhere to stringent quality and safety standards. These advanced palm oils undergo rigorous purification to substantially lower levels of **MOSH, MOAH, 3-MCPD & GE**, addressing significant concerns in the food industry regarding potential health risks associated with these contaminants.

Application

Ideal for all cooking methods including stir-frying, deep-frying, sautéing, soups, creams and baking. They can also replace dairy fat in beverages. These oils are recommended for deep-frying foods due to their high resistance to oxidation.

With low levels of **3-MCPD, GE, MOSH, and MOAH**, they meet stringent regulatory standards for infant products and other items in compliance with strict contaminant regulations.

Packing

Flexi Tank, ISO Tank, IBC, Drums, 20kg/18kg/16kg carton, 20L Jerry Can, 17kg tin.

Storage

It is recommended to be stored in a cool and dry place, away from direct sunlight and odoriferous materials.

Shelf-Life

One year from the manufacturing date in original, unopened packaging without mishandling.

Technical Specifications	LMG LMM Palm Oil	LMG LMM Olein	LMG LMM Stearin	LMG LMM Infant grade PO	LMG LMM Infant Grade Palm Olein
Free Fatty Acid (%as palmitic)	0.1 Max	0.1 Max	0.1 Max	0.1 Max	0.1 Max
Moisture & Impurities (%)	0.1 Max	0.1 Max	0.1 Max	0.1 Max	0.1 Max
Peroxide Value (meq/kg)	1.0 Max at Packing	1.0 Max at Packing	1.0 Max at Packing	1.0 Max at Packing	1.0 Max at Packing
Slip Melting Point (° C)	33 - 39	19 - 23	44 Min	33 - 39	24 Max
Colour (Lovibond 5.25" Cell)	3R + 30Y Max	3R + 30Y Max	3R + 30Y Max	3R + 30Y Max	3R + 30Y Max
Iodine Value (Wijs)	50 - 55	56 - 60	48 Min	50 - 55	56 Min
3-MCPD (ppm)	2.5 Max	2.5 Max	2.5 Max	2.5 Max	0.35 Max
GE (ppm)	1.0 Max	1.0 Max	1.0 Max	1.0 Max	0.1 Max
MOSH (ppm)	20 Max	20 Max	20 Max	10 Max	10 Max
MOAH (ppm)	2 Max	2 Max	2 Max	1 Max	1 Max



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