



Apical

Explore Our Range Of

Oleochemicals

For Everyday Products

Apical



A leading processor of vegetable oil

Apical is a leading vegetable oil processor with an expanding global footprint. Our vertically integrated mid-stream refining and value-added downstream processing makes us an integral supplier that supports the needs of various industries namely food, feed, oleochemicals and renewable fuel, including sustainable aviation fuel (SAF) which enables a great reduction of CO₂ emissions.

With integrated assets in strategic locations spanning Indonesia, China and Spain, Apical operates numerous refineries, oleochemical plants, renewable fuel plants and kernel crushing plants. Through joint ventures and strategic partnerships, Apical also has processing and distribution operations in Brazil, India, Pakistan, Philippines, Middle East, Africa, USA and Vietnam.

Apical's growth is built on the foundations of sustainability and transparency, and motivated by our strong belief that we can contribute to a circular economy for a more meaningful impact, even as we continue to grow our business and deliver innovative solutions to our customers.



Starting materials for many different everyday products

Vegetable oils especially those derived from palm fruits have a major advantage compared to other oil crops due to its high productivity and overall efficiency. It is regulated and produced in a sustainable manner, making it an eco-friendly choice.

Apical produces a range of products under its Oleochemicals business segment namely Fatty Acids, Refined Glycerine, Soap Noodles and Animal Nutrition among others. Through an experienced team with the technical knowhows, Apical provides customers with application advice, product customisations and innovative solutions.

For more information on Apical, visit www.apicalgroup.com

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Fatty Acids



APICID

APICID, Apical's Fatty Acid product range is palm based and various chains of fatty acids are produced through the splitting, fractionation and distillation process.

Fatty Acids are used widely in personal care products, cosmetics, detergents, soap, pharmaceuticals, food, lubricants, paints and coating, resins, rubber and plastics, textiles auxiliaries and candles among others.





OUR FATTY ACIDS INCLUDE:

- Caproic Acid
- Caprylic Acid
- Capric Acid
- Caprylic-Capric Acid Blend
- Lauric Acid
- Myristic Acid
- Palmitic Acid
- Oleic Acid
- Stearic Acid
- Triple Pressed Stearic Acid
- Rubber Grade Stearic Acid
- Distilled Coconut Fatty Acid
- Distilled Palm Kernel Fatty Acid
- Distilled Palm Stearic Acid
- Distilled Palm Oil Fatty Acid

Fatty Acid	Majo FA	Product Grade	Approximate Fatty Acid Composition (%)										Nickel (ppm)	FFA (%)	Specifications					
			C6: Caproic Acid	C8: Caprylic Acid	C10: Capric Acid	C12: Lauric Acid	C14: Myristic Acid	C16: Palmitic Acid	C18: Stearic Acid	C18 1: Oleic Acid	C18 2: Linoleic Acid	Others			Acid Value (mg KOH/g)	Saponification Value (mg KOH/g)	Iodine Value (gI2/100g)	Titer (°C)	COLOR Lovibond (Yellow/Red)	COLOR APHA (Hazen)
Caproic Acid 80%	C6-80%	Apicid CC-0680	80 Min	-	-	-	-	-	-	-	-	-	-	-	450 Min	-	3 Max	-	-	-
Caprylic Acid 99%	C8-99%	Apicid CA-0899	1 Max	99 Min	1 Max	-	-	-	-	-	-	-	-	-	383-390	384-391	0.5 Max	15-17	3.0Y/0.3R	Max 60
Capric Acid 99%	C10-99%	Apicid CP-1099	-	1 Max	99 Min	1 Max	-	-	-	-	-	-	-	-	323-330	324-331	0.5 Max	30-32	3.0Y/0.3R	Max 60
Caprylic - Capric Acid Blend	C8-C10	Apicid CA-0856	0.5 Max	53-63	35-45	1.5 Max	-	-	-	-	-	-	-	-	353-367	355-369	0.5 Max	6 Max	3.0Y/0.3R	Max 60
Lauric Acid 70%	C12-70%	Apicid LA-1270	-	-	1 Max	70-77	22-29	2 Max	-	-	-	-	-	-	265-275	266-276	0.5 Max	32-36	2.0Y/0.2R	Max 50
Lauric Acid 99%	C12-99%	Apicid LA-1299	-	-	1 Max	99 Min	1 Max	-	-	-	-	-	-	-	278-282	279-283	0.3 Max	42-44	1.2Y/0.2R	Max 40
Myristic Acid 99%	C14-99%	Apicid MA-1499	-	-	-	1 Max	99 Min	1 Max	-	-	-	-	-	-	243-247	244-248	0.3 Max	52-54	1.2Y/0.2R	Max 40
Palmitic Acid 80%	C16-80%	Apicid PA-1680	C14 & below = 15 max					80 Min	C18 + C18:1 + C18:2 = 20 Max			-	-	-	212-230	213-231	15 Max	55 Min	15Y/1.5R	-
Palmitic Acid 85%	C16-85%	Apicid PA-1685	-	-	-	-	-	85 Min	-	-	-	-	-	-	212-222	213-225	15 Max	55 Min	15Y/1.5R	-
Palmitic Acid 98%	C16-98%	Apicid PA-1698	-	-	-	-	2 Max	98 Min	2 Max	-	-	-	-	-	216-220	217-221	0.3 Max	60-63	2.0Y/0.2R	Max 40
Oleic Acid	C18:1-75%	Apicid OA-1878	-	-	-	-	-	-	-	75 Min	13 Max	-	-	-	196-204	197-205	86 Min	8.5 Max	15Y/2R	Max 225
Stearic Acid 55%	C18-55%	Apicid SA-1855	-	-	-	3 Max		41-47	52-58	-	-	1 Max	-	-	204-210	205-211	0.7 Max	55.5-57.5	3.0Y/0.3R	Max 60
Stearic Acid 65%	C18-65%	Apicid SA-1865	-	-	-	3 Max		30-36	63-68	-	-	1 Max	-	-	200-206	201-207	0.8 Max	58-61	3.0Y/0.3R	Max 60
Stearic Acid 92%	C18-92%	Apicid SA-1892	-	-	-	-	-	8 Max	92 Min	-	-	2 Max	-	-	194-201	195-202	1 Max	66-69	3.0Y/0.5R	Max 100
Triple Pressed Stearic Acid	C18-42%	Apicid TP-1842	-	-	-	3 Max		55-60	39-45	-	-	1 Max	-	-	206-212	207-213	0.5 Max	54-57	2.0Y/0.2R	Max 50
Rubber Grade Stearic Acid		Apicid RGSA	-	-	-	-	-	-	-	-	-	-	-	-	195 Min	196 Min	8 Max	52 Min	20Y/2R	-
Distilled Coconut Fatty Acid	C8-C18	Apicid DC-1248	0.5 Max	4-8	5-10	46-53	15-21	5-13	4 Max	5-12	3 Max	-	-	-	261-275	262-276	7-12	22-26	5.0Y/0.7R	Max 125
Distilled Palm Kernel Fatty Acid	C8-C18	Apicid DK-1250	-	1-4	1-4	46-52	13-18	7-14	1-4	12-19	1-3	0.5 Max	-	-	248-262	249-263	15-20	22-27	5.0Y/0.5R	Max 100
Distilled Palm Stearine Fatty Acid	C16-C18	Apicid DS-1660	-	-	-	4 Max		56-65	4-7	24-33	4-8	0.5 Max	-	-	207-214	208-215	28-39	47-53	3.0Y/0.5R	Max 100

Fatty Acid	Majo FA	Product Grade	Approximate Fatty Acid Composition (%)										Nickel (ppm)	FFA (%)	Specifications					
			C6: Caproic Acid	C8: Caprylic Acid	C10: Capric Acid	C12: Lauric Acid	C14: Myristic Acid	C16: Palmitic Acid	C18: Stearic Acid	C18 1: Oleic Acid	C18 2: Linoleic Acid	Others			Acid Value (mg KOH/g)	Saponification Value (mg KOH/g)	Iodine Value (gI2/100g)	Titer (°C)	COLOR Lovibond (Yellow/Red)	COLOR APHA (Hazen)
Distilled Palm Oil Fatty Acid	C16-C18	Apicid DP-1644	-	-	-	4 Max		40-48	3-9	35-44	7-12	0.5 Max	-	-	204-210	205-211	46-56	42-48	3.0Y/0.5R	Max 100
Distilled PK-1618 Fatty Acid	C16-C18	Apicid PK-1618M	C14 & below = 4 Max					17-25	6-11	55 Min	7-12	2.0 Max	-	-	195-210	196-211	62 Min	38 Max	-	-

Product Code	Packaging Format						
	 Drums	 ISO Tank	 IBC	 25kg bag	 Jumbo Bag	 Flexitank	 Bulk
Caproic Acid 80%	✓	✓	-	-	-	-	-
Caprylic Acid 99%	✓	✓	✓	-	-	-	-
Capric Acid 99%	✓	✓	✓	-	-	-	-
Caprylic - Capric Acid Blend	✓	✓	✓	-	-	-	-
Lauric Acid 70%	-	✓	-	-	-	✓	✓
Lauric Acid 99%	-	✓	-	✓	✓	-	✓
Myristic Acid 99%	-	✓	-	✓	✓	-	✓
Palmitic Acid 80%	-	✓	-	✓	✓	-	✓
Palmitic Acid 85%	-	✓	-	✓	✓	-	✓
Palmitic Acid 98%	-	✓	-	✓	✓	-	✓
Oleic Acid	✓	✓	-	-	-	✓	✓
Stearic Acid 55%	-	✓	-	✓	✓	-	✓
Stearic Acid 65%	-	✓	-	✓	✓	-	✓
Stearic Acid 92%	-	✓	-	✓	✓	-	✓
Triple Pressed Stearic Acid	-	✓	-	✓	✓	-	✓
Rubber Grade Stearic Acid	-	-	-	✓	✓	-	-
Distilled Coconut Fatty Acid	✓	✓	-	-	-	✓	✓
Distilled Palm Kernel Fatty Acid	✓	✓	-	-	-	✓	✓
Distilled Palm Stearine Acid	-	-	-	-	-	-	-
Distilled Palm Oil Fatty Acid	-	-	-	-	-	-	-
Distilled PK-1618 Fatty Acid	✓	✓	-	-	-	-	✓

Refined Glycerine








APICERINE

Refined Glycerine is colorless, odorless and sweet tasting. It is widely used in personal care products, cosmetics, pharmaceutical, surface coating, inks, tobacco products, textiles, lubricants, solvent, emollients, thickening agent, urethane, polymers, soap and sweetener (for food & beverage and confectioneries) among others.

It is also used as an intermediate in the production of epichlorohydrin, anti-freeze, and propylene glycol.

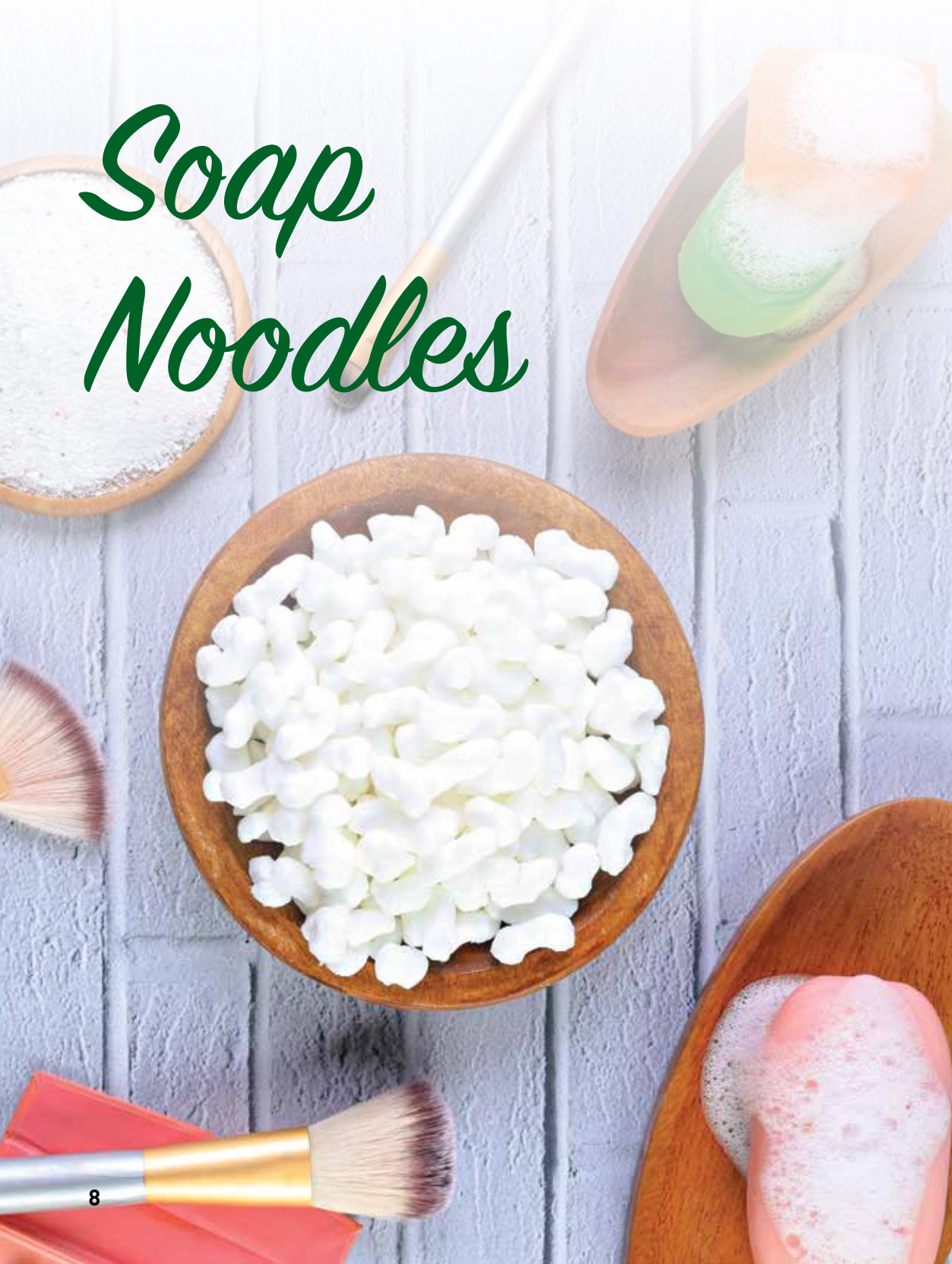


Product Specification	APICERINE G995 USP Refined Glycerine 99.5% USP	APICERINE G997 USP Refined Glycerine 99.7% USP	APICERINE G995 EP Refined Glycerine 99.5% EP	APICERINE G997 EP Refined Glycerine 99.7% EP	APICERINE G995 BP Refined Glycerine 99.5% BP	APICERINE G997 BP Refined Glycerine 99.7% BP
Glycerine Content (%)	99.5 Min	99.7 Min	99.5 Min	99.7 Min	99.5 Min	99.7 Min
Specific Gravity 25/25°C (-)	1.2607	1.2612	-	-	-	-
Color APHA (Hazen)	10 Max	10 Max	-	-	-	-
Water (%)	0.5 Max	0.3 Max	0.5 Max	0.3 Max	0.5 Max	0.3 Max
Residue on Ignition (%)	0.01 Max	0.01 Max	-	-	-	-
Chlorides (ppm)	10 Max	10 Max	10 Max	10 Max	10 Max	10 Max
Sulfate (ppm)	20 Max	20 Max	-	-	-	-
Chlorinated Compounds (ppm)	30 Max	30 Max	-	-	-	-
Fatty Acid & Esters (ml 0.5N NaOH/50g)	1 Max	1 Max	-	-	-	-
Identification A - Infrared Spectroscopy	Passed	Passed	-	-	-	-
Identification B - Limit of DEG & EG	Passed	Passed	-	-	-	-
Identification C - Chromatography	Passed	Passed	-	-	-	-
Individual Impurities (%)	0.1 Max	0.1 Max	-	-	-	-
Total Impurities (%)	1.0 Max	1.0 Max	-	-	-	-
Identification (-)	-	-	Passed	Passed	Passed	Passed
Appearance of Solution (-)	-	-	Colourless	Colourless	Colourless	Colourless
Acidity or Alkalinity (ml 0.1M NaOH)	-	-	0.2 Max	0.2 Max	0.2 Max	0.2 Max
Refractive Index (-)	-	-	1.470-1.475	1.470-1.475	1.470-1.475	1.470-1.475
Aldehydes (ppm)	-	-	10 Max	10 Max	10 Max	10 Max
Esters (ml 0.1 M HCl)	-	-	8.0 Min	8.0 Min	8.0 Min	8.0 Min
Impurities A and Related Substances (-)	-	-	Passed	Passed	Passed	Passed
Halogenated Compounds (ppm)	-	-	35 Max	35 Max	35 Max	35 Max
Sugars (-)	-	-	Passed	Passed	Passed	Passed
Heavy Metals (ppm)	-	-	5 Max	5 Max	5 Max	5 Max
Sulfated Ash (%)	-	-	0.01 Max	0.01 Max	0.01 Max	0.01 Max

Product Code	Packaging Format				
	 Drums	 IBCs	 Flexitank	 ISO Tank	 Bulk
APICERINE G995 USP	✓	✓	✓	✓	✓
APICERINE G997 USP	✓	✓	✓	✓	✓
APICERINE G995 EP	✓	✓	✓	✓	✓
APICERINE G997 EP	✓	✓	✓	✓	✓
APICERINE G995 BP	✓	✓	✓	✓	✓
APICERINE G997 BP	✓	✓	✓	✓	✓



Soap Noodles



APISALT

Soap Noodles are the fatty acids derived either from vegetable oil or animal fats. It is produced from the saponification of neutral fats and oil, neutralisation of fatty acid and saponification of methyl esters. Soap Noodles are used as the main ingredient in soap bars, cosmetic, laundry soap, industrial soap and other specialty applications.

APISALT, Apical's soap noodles is vegetable based and derived from palm. Our product range includes the following and the selection depends on a customer's formulation and products.

VEGETABLE OPAQUE SOAP BASE

- 8020S / 8021S
- 7525S / 7030S

Standard vegetable soap with various oil composition, comprising of a blend of palm and palm kernel. The whiteness and high colour stability ranks this soap base.

NATURAL SOAP BASE

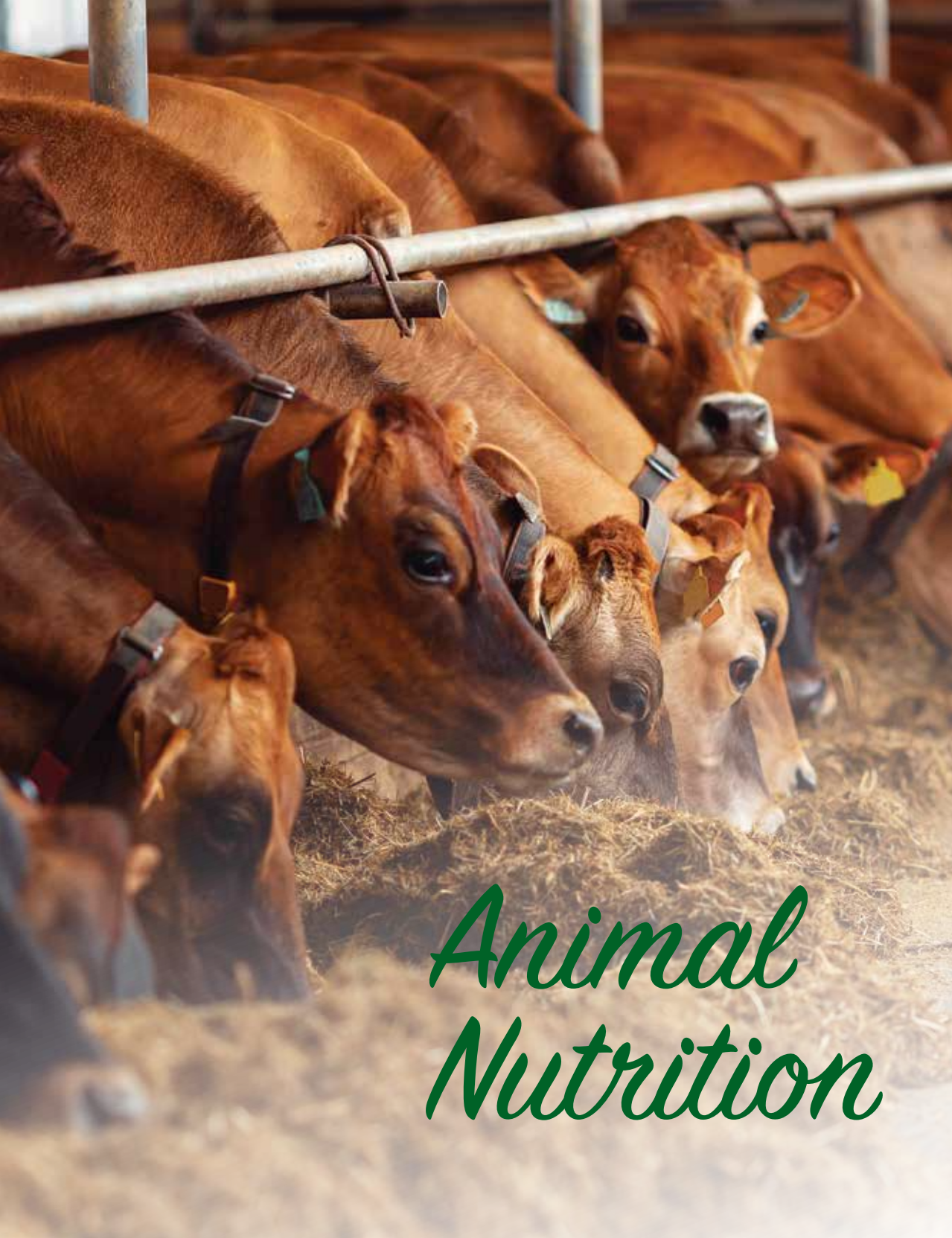
EDTA free soap that is often used as the new green soap base for cosmetics and toiletries product.

LUXURY SOAP BASE

Soap base with high lauric content that promotes high and dense lathering compared to standard soap.

CUSTOMISED SOAP BASE

Commercial and customised formula can be developed depending on preferred application properties.



Animal Nutrition



OPTYMAX

Feed fats are essential to animal nutrition. The quantity of oil and fat that should be used in animal diets differ according to the species and their digestive systems.

Optymax, Apical's well formulated animal nutrition product range for ruminants, monogastric, poultry and others are made from sustainably sourced fatty acids and their derivatives. With a highly concentrated source of fats, these nutrients are developed to boost energy, milk yields and ensure consistent productivity.

OUR ANIMAL NUTRITION PRODUCT RANGE INCLUDES






- Palmitic Series
- Triglyceride Series
- Calcium Salt Series



Product Specification					
Test Description	Test Method	PF-99 Palmitic Acid 98	PF-95 Palmitic Acid 95	PF-85 Palmitic Acid 85	PF-80 Palmitic Acid 80
Acid Value (mg KOH/g)	AOCS Te 1a-64	216.0-220.0	216.0-220.0	212.0-224.0	212.0-230.0
Saponification Value (mg KOH/g)	AOCS Tl 1a-64	217.0-221.0	217.0-221.0	213.0-225.0	213.0-231.0
Iodine Value (g I2/100g)	AOCS Tg 1a-64	0.30 Max	0.50 Max	15.0 Max	15.0 Max
Titer (°C)	AOCS Tr 1a-64	60.0-63.0	59.0-63.0	55.0 Min	55.0 Min
Total Fatty Matter (%)	By Calculation	99.0 Min	99.0 Min	98.0 Min	98.0 Min
Moisture (%)	AOCS CA 2e-84	0.5 Max	0.5 Max	0.5 Max	0.5 Max
Colour APHA (Hazen)	AOCS Td 1b-64	40.0 Max	40.0 Max	-	-
Lovibond 5 1/4" (Yellow/Red)	AOCS Cc 13e-92	10Y Max/1.0R	2.0Y/0.2R Max	10Y Max/1.0R	20Y/2R Max
Fatty Acid Composition					
C14 (%) & Below	AOCS Ce 1a-13	-	4.0 Max	5.0 Max	5.0 Max
C14 (%)	AOCS Ce 1a-13	2.0 Max	-	-	-
C16 (%)	AOCS Ce 1a-13	98.0 Min	95.0 Min	85.0 Min	80.0 Min
C18 (%)	AOCS Ce 1a-13	2.0 Max	3.0 Max	20.0 Max	20.0 Max

Product Specification	
Test Description	CS-85 Calcium Salt 85
Total Fat Content (%)	82-85
Ash Content (%)	12.5 Max
Water Content (%)	3.0-6.0
Calcium (%)	8% Min

Product Specification		
Test Description	Test Method	BP-100
Total Fat Content (%)	AOAC 963.15	99.5 Min
Slip Melting Point (°C)	AOCS Cc 3 – 25	56 Min
Free Fatty Acid (% as Palmitic – at filling)	AOCS Ca 5a – 40	0.5 Max
Moisture (%)	AOCS Ca 2b – 38	0.5 Max
Colour	Appearance	Off White
Typical Fatty Acid Composition		
C14 (%)	AOCS Ce 1 – 89	3 Max
C16 (%)	AOCS Ce 1 – 89	70 Min
C18 (%)	AOCS Ce 1 – 89	8 Max
Unsaturated Fatty Acid	AOCS Ce 1 – 89	12 – 16

Product Code	Packaging Format				
	 25kg Bag	 500kg Jumbo Bag	 600kg Jumbo Bag	 650kg Jumbo Bag	 700kg Jumbo Bag
PF-99 Palmitic Acid 98	✓	✓	✓	✓	✓
PF-95 Palmitic Acid 95	✓	✓	✓	✓	✓
PF-85 Palmitic Acid 85	✓	✓	✓	✓	✓
PF-80 Palmitic Acid 80	✓	✓	✓	✓	✓
CS-85 Calcium Salt 85	✓	✓	✓	✓	✓
BP-100	✓	-	-	✓	-
BP-300	✓	-	-	✓	-

Apical

Sustainability, the heart of our business



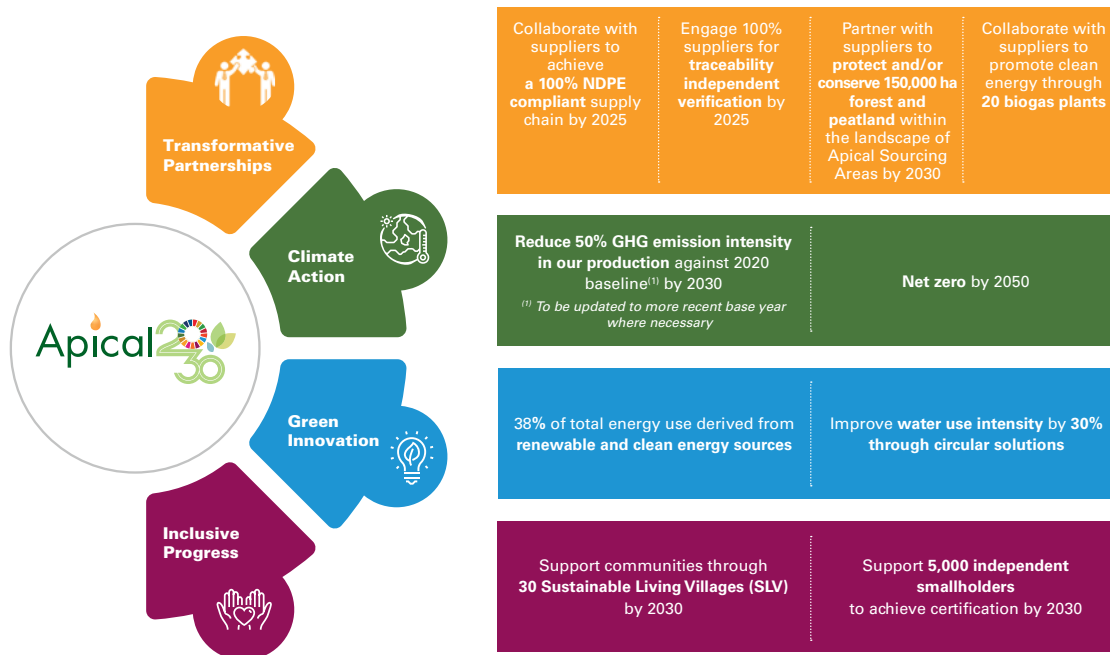
Apical2030



5Cs Business Philosophy

Apical2030 is our strategic sustainability initiative that maps the future direction for the Group. Anchored to meaningful social and environmental impacts, Apical2030 focuses on four strategic pillars.

Sustainability is our way of thinking, being and running our business. We are guided by our 5Cs business philosophy of doing what is good for the community, country, climate, customer and only then, will it be good for the company.

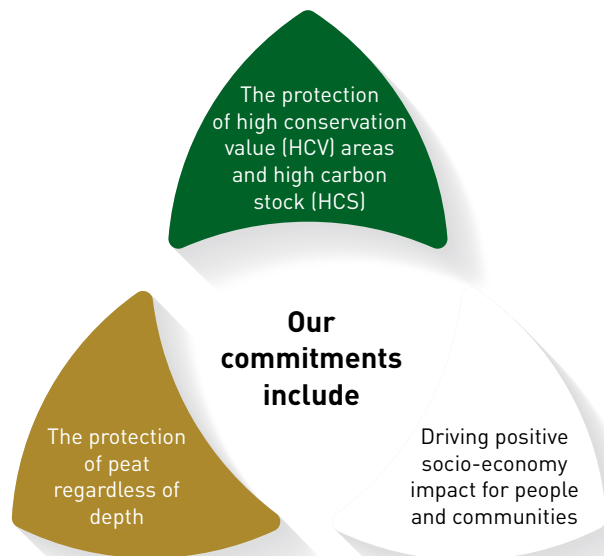




Apical Sustainability Policy

Our Sustainability Policy outlines our commitment to ensuring sustainable practices are adopted across the entire value chain of our palm oil production, from cultivation to processing and delivery to end users.

We work to ensure that our suppliers comply with our sustainability commitments, local laws and regulations. We will source our supply only through networks that are transparent and traceable.



A-SIMPLE Framework

Apical Sustainability Implementation (A-SIMPLE) Framework is our mechanism to ensure the effective implementation of our Sustainability Policy.

A-SIMPLE Framework includes the following components:



View our [Sustainability Progress Dashboard](#) on Apical's website for more information on the progress of our Sustainability Policy, our anchor programmes, and our sustainability transformation journey.

Partner with Apical to explore the many palm-derived oleochemicals for everyday products. Contact us at salesoleo@apicalgroup.com

Our Locations

OLEOCHEMICAL PLANTS

PT Apical Kao Chemicals

Q946+CRV, Jl. Raya Lubuk Gaung
Sungai Sembilan
Kota Dumai, Riau, 28826
Indonesia

PT Kutai Refinery Nusantara

Jl. Teluk Waru RT. 09, Kel. Kariangau
Kec. Balikpapan Barat - Kota
Balikpapan
Kalimantan Timur
Indonesia

PT Sari Dumai Oleo (Dumai)

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Kel. Lubuk Gaung
Kec. Sungai Sembilan
Kota Dumai 28826
Indonesia

PT Sari Dumai Oleo (Marunda)

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KBN Marunda, Cilincing, Jakarta Utara
DKI Jakarta 14150
Indonesia

PT Sari Dumai Sejati

Jl. Raya Lubuk Gaung
Kel. Lubuk Gaung
Kec. Sungai Sembilan
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Indonesia

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Indonesia

PT Padang Raya Cakrawala

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Bio-Oils La Rabida

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