

PALM CHEMICALS BROCHURE

About Us

Tradeasia International Pte. Ltd. is a privately owned, independent company headquartered in Singapore. We are a global trading organization providing integrated chemical procurement services with certainty and trust, which makes Tradeasia unique.



Tradeasia International was setup with the sole intention of carrying out chemical distribution services especially to commodity industries in many parts of the world. Today, Tradeasia International represents a growing number of businesses that are serving a variety of markets. We source and supply about 500-600 containers monthly to our customers worldwide.



Lauric Acid

Lauric acid, or dodecanoic acid is the main fatty acid in coconut oil and in palm kernel oil. It is an organic compound with a molecular formula of $C_{12}H_{24}O_2$. Lauric acid can react with sodium hydroxide resulting sodium laurate that is a soap. Although it is slightly irritating to mucous membranes, has a very low toxicity and so is used in many soaps and shampoos.

HS Code : 29159090 CAS No. : 143-07-7

Origin: Indonesia, Malaysia

Packaging : • 25 kg/drum

• 1 kg/aluminium foil bag



Specifications:

Property	Unit	Value
Appearance		Water solid
Acid Value (KOH)	mg/g	252 - 287
Iodine Value	g/100g	3.0 (max)
Ignition Residue	%	0.1 (max)
Saponification Point	°C	26 - 44
Unsaponifiable Matter	%	0.3 (max)
Water	%	0.2 (max)
Pb	mg/g	0.1 (max)

Applications:



Soap & Detergent Industry

The reaction of lauric acid with NaOH would yield a product that is used for solid soap, whereas that with KOH would yield a product that is used for liquid soap manufacture.



Cosmetics Industry

Lauric acid is used in skin care and beauty products because it possesses anti-microbial and anti-acne properties. It can form monolaurin that is used as a surfactant in cosmetics like deodorant.



Plastics Industry

The reaction of lauric acid and methanol in the presence of potassium hydroxide as a catalyst can produce biodiesel which is a renewable, alternative energy. It is also used as a lubricant in plastic manufacture.



Category: Fractionated Fatty Acid

Stearic Acid

Stearic acid chemicals known as octadecanoic acid is one of the most common and useful type of saturated fatty acids found in combined form in natural animal and vegetable fats. Esters and salts of stearic acid are known as stearate. Naturally stearic acid occurs as a mixed triglyceride, or fat, with other long-chain acids and as an ester of a fatty alcohol.

HS Code : 29157020 CAS No. : 57-11-4

Origin : Indonesia, Malaysia

Packaging : 25 kg Paper bags, 17MT/FCL

Specifications:

Property	Unit	Value
Iodine Value	gl ₂ /100g	4 max
Acid Value	mg KOH/g	207 - 215
Saponification Value	mg KOH/g	208 - 216
Titer	°C	50 (min)
Color Lovibond 5.25" Cell		0.5 R / 3.5 Y (max)
C 14 & below	%	5 (max)
C 16	%	50 - 70
C 18	%	30 - 50
> C 18	%	1 (max)

Applications:



Paint Industry

Stearic acid is a very effective wax modifier used in candle making. It is a non-toxic additive that increases the opacity and hardness of candles. It increases the candle durability consistency and melting point.



Soap & Detergent Industry

Stearic acid acts as a thickener or hardener to help the soap to retain its shape. It is a powerful cleanser and acts as an emulsifying agent to bind oil and water, so it is used in facial cleanser, shampoos and shaving cream.



Food Industry

Stearic acid is used in making margarine and other creamy spreads, chewing gums, bakery products, dietary supplements, soft drinks and artificial sweeteners.



Textile Industry

Stearic acid is used along with castor oil for preparing softeners in textile sizing.

Category: Fractionated Fatty Acid

Myristic Acid

Myristic acid is a common fatty acid that is found in both plant oils and animal fats which is also known as tetradecanoic acid. It is found widely distributed in fats throughout the plant and animal kingdom, including common human food, for instance, nutmeg. Myristic acid is an important fatty acid, which the body utilizes to stabilize different proteins, including proteins used in the immune system.

HS Code : 29151290 CAS No. : 544-63-8

Origin : Indonesia, Malaysia

Packaging : • 20 kg/drums

• 200 kg/drums



Property	Unit	Value
Appearance		Crystalline powder
Purity	%	99 (min)
Loss on Drying	%	0.5 (max)
Heavy Metal	ppm	10 (max)
Sulfated Ash	%	0.2 (max)
Total Impurities	%	0.2 (max)

Applications:



Cosmetics Industry

Myristic acid is used to manufacture isopropyl myristate, which is used in cosmetic where good absorption through the skin is desired. In facial creams, it is used as an emulsifier.



Plastics Industry

Myristic acid is used as a plasticizer, intermediate, internal and external lubricant in plastic industry.



Soaps Production

Myristic acid is used in the production of soaps, because it adds hardness to soap, has good cleansing properties and produces nice fluffy lather.



Other Applications

Myristic acid is used as an anionic or non-ionic surfactant for chemicals, textiles, and food. It is used in the production of surface active agent, chemical reagent, etc.

Refined Glycerine

Refined glycerine, also known as glycerol or glycerin, is a simple straight-chain sugar alcohol that has three hydroxyl groups, which results in water solubility and hygroscopicity of glycerin. It is used in many applications such as food, medicine, cosmetics and personal care items. It is also a versatile and valuable product from biodiesel production.

HS Code : 2905 CAS No. : 56-81-5

Origin : Indonesia, Korea, Malaysia, Thailand Packaging : 250 kg HDPE drums, 20 MT/FCL



Specifications:

Property	Unit	Value
Glycerol Content	%	99.5 (min)
Water	%	0.5 (max)
Density (20°C)	g/ml	1.2598 (min)
Chloride	%	0.001 (max)
Sulfated Ash	%	0.01 (max)
Acidity or Alkalinity	mmol/100g	0.05 (max)
Saponification Equivalent	mmol/100g	0.40 (max)
Arsenic Content (As)	mg/kg	2.0 (max)
Heavy Metal (Pb)	mg/kg	5.0 (max)
Reducing Content		Accepted

Applications:



Food Industry

Glycerine is used in foods and beverages to keep the food moist, make it sweet, serve as a solvent, and can be used as a food preservative. It is used as a sugar substitute and a filler in commercial low-fat foods



Oral & Personal Care Products

Refined glycerine is used in cosmetics and toiletries such as lotion, soap, makeup, etc. because it is non-toxic in nature. It is also used to manufacture toothpaste and other oral care products.



Pharmaceutical Industry

Glycerine is used to improve smoothness and lubricity and maintain moisture. It is widely used in a variety of medical & pharmaceutical products, such as cough syrup, and personal care products such as mouthwashes.



Solvent

Glycerine can form strong hydrogen bonds with water, so glycerol-water bonds are superior to water-water hydrogen bonds. Therefore, the formation of ice is hindered unless the temperature is very low.

Crude Glycerine



Crude glycerine is impure form of refined glycerine. It is derived from both natural and chemical feedstock. Glycerine occurs in combined form in vegetable oils and fats as triglyceride. It is also found in animal fats. Crude glycerine is obtained as a byproduct from biodiesel manufacturing plant and oleochemical industries.

HS Code : 1520.00.00 CAS No. : 56-81-5

Origin: China, Indonesia, Brazil

Packaging : 1 @ 22 MT Flexible Tank, 22 MT / 20 FCL

Specifications (Indonesia Origin):

Unit Value **Property** Light yelllow to dark brown, Appearance at 25°C viscous liquid 70 - 82 Glycerol Content Water % 0.5 - 6.0 Methanol 2.0 - 4.0 3.0 - 6.0 Ash Viscosity at 20°C cSt 350 - 550 Density at 20°C 1.15 - 1.23 g/ml MONG (Methanol Included) 8.0 - 16.0

Specifications (Brazil Origin):

Property	Guarantee	Method
Aspect (@25°C)	Viscous liquid, with brown coloring	Visual
Smell	Characteristic	POP MTCS 09
Glycerine	>80.00	AOCS Ea 6-94
Water	<15.00	Karl Fischer
Salt	<7.00	AOCS Ea 2-38
Specific Weight at 25°C	1.23 - 1.25	ASTM D 1298
Methanol	<1.00	CHROMATOGRAPHY
Ash	<7.00	AOCS Ea 2-38
MONG	<4.00	ISO 2464

Applications:



Oil Industry

Crude glycerine is used to manufacture polyols, which are used as a raw material for production of polyurethane. Polyurethanes are used to manufacture flexible and rigid foams.



Animal Feed Industry

Crude glycerine is used in the production of animal feed as it has a high absorption rate in animals and rich in energy. Once absorbed by animals, it is converted to glucose by the enzyme glycerol kinase for energy production in the liver of animals.



Pharmaceuticals Industry

Glycerine is used in medical and pharmaceutical, mainly as a means of improving smoothness, providing lubrication and as a humectant. It is present in allergen immunotherapies, cough syrups and expectorants

Palm Fatty Acid Distillate

Palm Fatty Acid Distillate (PFAD) is a by-product of crude palm oil refinery plant. Palm Fatty Acid Distillate (PFAD) is taken as distillate of stripping tower of Free Fatty Acid (FFA). It is a light brown solid at room temperature, melting to a brown liquid on heating. PFAD consist of palmitic acid, oleic acid and the remaining components are triglycerides, partial glycerides and unsaponifiable matters.



HS Code : 38231900 CAS No. : 8002-75-3

Origin : Indonesia, Malaysia, Thailand

Packaging : 1 @ 21 MT Flexi Bag,

21 MT / 20'FCL

Specifications:

Property	Unit	Value
Appearance		Light yellow to brown liquid
Purity	%	≥99.9
Free Fatty Acid (as Palmitic)	%	≥70
Moisture & Impurities	%	≤1
Saponifiable Matter	%	≥95

Applications:



Animal Feed Industry

PFAD is used as a feedstock for many different products of animal feeds such as calcium soap for animal feed. It is used to produce food emulsifiers, foam stabilizers, water repellant and to extract Vitamin E.



Bio-diesel Manufacturing

Palm fatty acid distillate is used as a low-cost raw material for bio-diesel production.



Cosmetics Industry

PFAD is used to produce fatty alcohol and fatty acid esters used in cosmetic industries.



Detergent Industry

PFAD is used to manufacture laundry and toilet grade soap noodles depending on oils blend and ratios.



Palm Acid Oil

Palm acid oil (PAO) is a by-product obtained from the refining of palm oil. It contains mainly of Free Fatty Acid (FFA) up to 50% and neutral oil, with 2-3% moisture and other impurities. It is similar to palm fatty acid distillate but its FFA is generally lower. PAO is increasingly used for mixing in biofuel.

HS Code : 3823.11.00 CAS No. : 68440-15-3

Origin: Indonesia, Malaysia

Packaging : 1 @21 MT Flexi Bag, 21 MT / 20 FCL

Specifications:

Property	Unit	Value
Appearance		Orang light brown fluid
FFA	%	35 (min)
Total Fatty Matter	%	97 (min)
Saponification Value	MgKOH/g	195 (min)
Iodine Value	g l ₂ /100g	45 (min)
Moisture & Impurities	%	3 (max)

Applications:



Animal Feed Industry

Palm acid oil is used as a raw material for the manufacturing of animal feed.



Bio-diesel Manufacturing

Palm acid oil is the base material for biodiesel manufacturing. Significant amount of palm oil converted to biodiesel in Indonesia and Malaysia at about 40% and 30%.



Chemical Intermediates

Palm acid oil is used to manufacture palm based different fatty acids for industrial uses. Mainly palmitic acid, oleic acid and stearic acid are manufactured form palm acid oil.



Soap Manufacturing

It is used as an ingredient for laundry soaps because palm acid oil supposed antimicrobial effects.

RBD Palm Stearin

Refined Bleached Deodorized (RBD) Palm stearin is a vegetable fat, derived from palm oil. It is solid fraction of RBD palm oil, obtained by fractionation of RBD palm oil, using simple crystallization and separation processes at controlled temperature. RBD palm oil is cholesterol free and it has an anit-blood clotting effect, which helps prevent from heart dieses. RBD palm stearin contains approximately equal proportion of saturated and unsaturated fatty acids.

HS Code : 1511.90.99 CAS No. : 8002-75-3 Origin : Indonesia

Packaging : • 1 @21 MT Flexi Bag, 21 MT / 20 FCL

• 1050 @21 kg carton, 21 MT/ 20'FCL



Specifications:

Property	Unit	Value
Appearance		White solid
FFA (as palmatic)	%	0.2 (max)
Moisture & Impurities	%	0.15 (max)
Iodine Value (Wijs)	g l ₂ /100g	48 (max)
Melting Point (AOCS Cc 3-25)	°C	44 (min)
Color		3.0 Red (max)

Applications:



RBD palm stearin is used to manufacture multipurpose and laundry grade soap noodles. Soap noodles made from RBD palm stearin is differ in color from that of RBD palm oil soap noodles, so it finds applications only in low cost toilet soap bar and laundry grade soap bar.



Food Industry

RBD Palm Stearin is a very useful source of fully natural hard fat component for products such as shortening and pastry and bakery margarines. Palm stearin can provide the required solids in blends with unsaturated vegetable oils. It is a natural source of solid fat and can be used to provide increased stability for many types of foods that require solid fat functionality.



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