

OsmoFAT

For Animal Use Only





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Energy is as equally important as protein in feed. In livestock feed, fat supplies energy and other nutrients to animal. The use of supplemental fats and oils in animal diets as an energy source is a widespread practice in the animal feed industry.

Fats derived from vegetable based raw material are safe compare to animal fat regarding contamination by different microorganisms.

Different fats have different fatty acids composition. Different fatty acids compositions will contribute different qualities of animal body fat and meat composition due to varying digestibility. Digestibility of certain fat is low.

OsmoFAT is the right choice to solve fat related problems. It is a feed fat made from raw material 100% vegetable based with optimal fatty acid composition, good digestibility and high palatability with pleasant aroma.

OsmoFAT is a product of Osmosis Nutrition. It is a dynamic company, leading specialist in manufacturing and distribution of animal health and nutrition products.

Osmosis Nutrition provides nutritional and veterinary pharmaceutical products to the satisfaction of customers.

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Functions of **OsmoFAT**:

- Increases energy uptake.
- Boosts feed conversion.
- Improves daily weight gain.
- Shortens the fattening period.
- Makes excellent carcass quality.
- Builds up natural resistance to disease.
- Remarkable improvement in production.
- Better digestion and water balance in the gut.
- Increases the proportion of lean meat.
- Excellent digestibility and acceptance to animal.
- Improves absorption of nutrients from diets.

Unique Features of **OsmoFAT**:

- High proportion of palmitic acid (C16:0). The presence of minimum 70% palmitic acid (C16:0) confirms optimizing the feed and the result is better fattening performance and carcass quality.
- Maximum Iodine value 17 wjjs ensures very low unsaturated fatty acid bond present in **OsmoFAT**
- Melting point 54-60 °C ensures chemical stability and protection from auto oxidizing and creating harmful free radicals.
- **OsmoFAT** is not soggy and not rancid easily due to its granular form.

Why OsmoFAT, Why Malaysia:

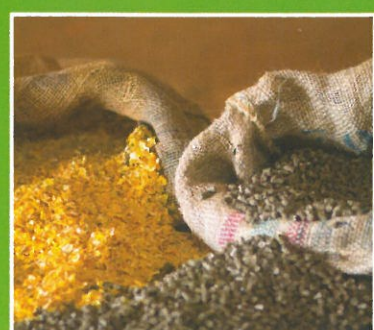
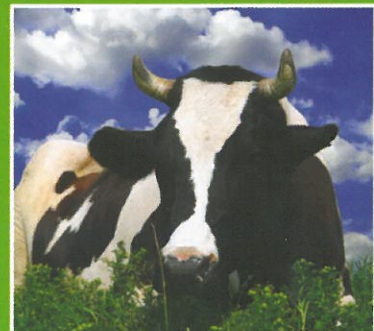
- At present, Malaysia is the second largest palm oil producer in the world.
- Malaysia has a transparent trade in palm oil on price and production.
- Malaysian palm oil industry is well organized by various organizations such as MPOB (Malaysian Palm Oil Board), PORAM (Palm Oil Refiners Association of Malaysia), MPOA (Malaysian Palm Oil Association), MOMG (Malaysian Oleochemical Manufacturers Group), MPOC (Malaysian Palm Oil Council), RSPO (Round Table on Sustainable Palm Oil).
- We have excellent infrastructure for logistics and exports.
- We never use recycle oil, so our fat content is always above standard.
- The location of our plant is very strategic, transportation to Port Klang is convenient.
- Latest special blending tanks and homogenizers are used in our factory.

Lecithin Added Fat Powder:

Due to addition of lecithin OsmoFAT have greater advantages. Lecithin consist of the phospholipid core in conjunction with glycolipids, sterols, tocopherols, carbohydrates and triglycerides. Fatty acids such as linoleic and linolenic acids are also structural components of lecithin.

- Lecithin maintains and regenerates the uniformity of bio-membrane.
- Helps transportation of triglyceride and other nutrients.
- Improves absorption and utilization of nutrients.
- Emulsify feed fat and its distribution in intestines.
- Provides energy, choline, inositol and available phosphorus.
- Stimulates the process of reproduction and immune response.
- Acts as anti-oxidant and anti-stress agent.
- Improves fat utilization ability of young animals.

The ultimate result is higher average final weight and improves production.



Comparative Study Between OsmoFAT and Conventional Oil

Factors	Conventional Oil					OsmoFAT
	General	Coconut oil	Rice Bran oil	Soybean oil	Palm oil	
Unsaturated Fatty Acid (UFA)	Soybean and corn oil contain very high unsaturated fatty acids (UFA) contents. Hence, extra antioxidant should be supplemented, and this will increase feed cost.	10%	75%	80%	50%	Considerably low unsaturated fatty acid, therefore, no antioxidant is needed.
Polyunsaturated Fatty Acid (PUFA)	As soybean and corn oil contains very high UFA and the majority is polyunsaturated fatty acid (PUFA) . High levels of PUFA cause inferior quality of meat and increase the susceptibility for oxidation.	2%	37%	58%	9.1%	Low polyunsaturated fatty acid only 2%.
Palmitic Acid (C16:0) (Approx.)	Corn and soybean oil contain 11%, whereas palm oil contains only 45%.	8.8%	21.5%	11%	45%	OsmoFAT contains minimum 70% palmitic acid (C16:0) which optimizing the feed quality, leading to better fattening performance and carcass quality as compare to other conventional oil added feed.
Flexibility of Use	Liquid fats like soy or rapeseed oil can only be added up to 3% of the ration.					OsmoFAT powder permits an addition of up to 8% without causing problems.
Iodine Value (wijs) (Approx.)	Conventional oil contains high iodine value.	7-12	100	132	52.9	Maximum 17 wijs ensures low unsaturated fatty acid.
Lecithin	No lecithin added.					Due to addition of lecithin, OsmoFAT increases the utilization of energy and improves the digestion of other feed ingredients. The ultimate result is excellent fattening process.
Using Procedure	The use of liquid products (oil/fat) requires complex, heated tank installation with stirring and spraying equipments.					Very easy to dose.
Palatability & Pelletability	Reduce palatability due to the smell of oil. Feed pelletability down.					Increase pellet binding quality and palatability.

OsmoFAT 100

PRODUCT DESCRIPTION:

OsmoFAT100 is a high concentrated source of energy supplement rumen stable feed fat specially produced from fractionated palm oil which are non-hydrogenated and free from Trans Fatty Acids (TFA). **OsmoFAT100** is adding to the feed rations of ruminants to boost the energy intake to sustain the energy deficit of the dairy cows.

SPECIFICATIONS:

Total Fat Content	98% Min
Free Fatty Acids	1% Max
Moisture & Impurities	0.5% Max
Slip Melting Point	54-60°C
Iodine Value	17 Wijs Max

TYPICAL FATTY ACIDS PROFILE

Saturated Fatty Acids:

C14:0 Myristic Acid	approx. 1.5%
C16:0 Palmitic Acid	70% Min
C18:0 Stearic Acid	approx. 4-9%

Unsaturated Fatty Acids:

C18:1 Oleic Acid	approx. 10%
C18:2 Linoleic Acid	approx. 2%

DOSAGE:

400-750 g per cow/day, depending on milk yield.

STORAGE CONDITION:

Store in cool and dry place. Keep away from odoriferous materials and avoid exposing to direct sunlight.

PACKING:

25 kg

INDICATIONS:

- Increases milk yield
- Prevents loss of body weight
- Increases fat and protein percentage in milk
- Stabilization of protein and casein
- Avoid crisis of ketosis, milk fever, fatty liver and other metabolic disorders
- Stimulates fertility
- Optimizes energy intake
- Shortens calving interval
- Highly palatable
- Very good digestibility
- Relieves impact of heat stress
- No adverse effects in the rumen

OsmoFAT 100

For Animal Use Only
(Rumen Stable Feed Fat)

PRODUCT DESCRIPTION:

OSMOFAT 100 is a high concentrated source of energy supplement feed fat specially produced from highly stable 100% vegetable based fully refined palm oil fraction which are non-hydrogenated and free from Trans Fatty Acids (TFA). OSMOFAT 100 is adding to the feed rations of ruminants to boost the energy intake to sustain the energy deficit of the dairy cows.

SPECIFICATIONS:

Total Fat Content	98% Min
Free Fatty Acid	1% Max
Moisture & Impurities	0.5% Max
Slip Melting Point	54 Deg C Min
Iodine Value	17 Wijs Max

DOSAGE:

Dairy cattle: 400-750 g per cow/day

STORAGE CONDITION:

Store in cool and dry place. Keep away from odoriferous materials and avoid exposing to direct sunlight.

PACKING:

Manufactured by:
Osmosis Nutrition Sdn Bhd (94478-A)
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OsmoFAT 300

INDICATIONS:

- Increases energy uptake
- Shortens fattening period
- Improves daily weight gain
- Yields high carcass weight and improves carcass quality
- Ensures longer shelf life of meat due to better resistance to oxidation
- Better digestion and water balance in the gut.
- Better palatability and pellet ability.
- Increases production and quality of milk of sow.
- Improves egg size and quality.
- Reduces drip loss.

PRODUCT DESCRIPTION:

OsmoFAT 300 is a high concentrated source of energy supplement lecithin added feed fat specially produced from fractionated palm oil which are non-hydrogenated and free from Trans Fatty Acids (TFA). **OsmoFAT 300** is added to the feed to improve the emulsifying properties and thus increase the digestibility of poultry and other monogastric animals.

SPECIFICATIONS:

Total Fat Content	98%	Min
Free Fatty Acids	1%	Max
Moisture & Impurities	0.5%	Max
Antioxidant	Added	
Slip Melting Point	54-60°C	
Iodine Value	17	Wijs Max

TYPICAL FATTY ACIDS PROFILE

Saturated Fatty Acids:

C14:0 Myristic Acid	approx. 1.5%
C16:0 Palmitic Acid	70% Min
C18:0 Stearic Acid	approx. 4-9%

Unsaturated Fatty Acids:

C18:1 Oleic Acid	approx. 10%
C18:2 Linoleic Acid	approx. 2%

Lecithin Dose Rate 3-6%

DOSAGE:

Target Animal	Addition to Feed Ration
Poultry	2-5%
Fattening Pig	1-3%
Sow	2-5%

STORAGE CONDITION:

Store in cool and dry place. Keep away from odoriferous materials and avoid exposing to direct sunlight.

PACKING:

25 kg

OsmoFAT 300

For Animal Use Only
(Lecithinized Animal Feed Fat)

PRODUCT DESCRIPTION:

OSMOFAT 300 is a high concentrated source of energy supplement feed fat specially produced from highly stable 100% vegetable based fully refined palm oil fraction which are non-hydrogenated and free from Trans Fatty Acids (TFA). OSMOFAT 300 is added to the feed to improve the emulsifying properties and thus increase the digestibility of poultry and swine.

SPECIFICATIONS:

Total Fat Content	98% Min
Free Fatty Acid	1% Max
Moisture & Impurities	0.5% Max
Slip Melting Point	54 De
Iodine Value	
Lecithin Dose Rate	

DOSAGE:

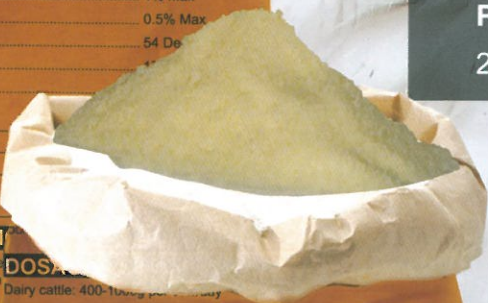
Target Animal	Addition to Feed Ration
Poultry	2-5%
Pig fattening feed	1-3%
Feed for sows	2-5%

STORAGE CONDITI

Store in cool and dry place. Keep away from odoriferous materials and avoid exposing to direct sunlight.

PACKING:

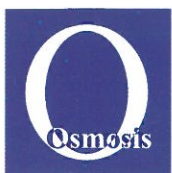
25 kg



STORAGE CONDITION:

Store in cool and dry place. Keep away from odouriferous materials and avoid exposing to direct sunlight.

PACKING:



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