



CHEESE PLUS CHEESE PRODUCT

PRODUCT DESCRIPTION: Cheese Plus Cheese is a dried cheese product that contributes quality nutrients and enhances palatability of swine starter and aquaculture feeds. Cheese Plus Cheese provides an economical source of milk protein and fat and has been shown to compare favorably to dried skim milk in research studies. Cheese Plus Cheese has a pleasant cheese aroma and flavor. Unlike artificial flavors, the flavor from Cheese Plus Cheese is heat stable, allowing extruded, cooked, or pelleted products to maintain their cheese aroma and taste. Cheese Plus Cheese is formulated from various cheese-type products from the food industry, including dried cheese, cheese rind, processed cheese foods, cheese-flavored powders and cheese snack products.

USAGE: Cheese Plus Cheese is recommended at an inclusion rate of 3-15% in swine starter diets and aquaculture feeds.

PRODUCT ANALYSIS:

	Guaranteed Analysis	Typical Analysis	Method
Physical			
Color:	Cheddar orange color	N/A	Organoleptic
Aroma:	Characteristic cheese aroma	N/A	Organoleptic
Texture:	Powder with cheese granules	N/A	Organoleptic
Taste:	Cheese Taste	N/A	Organoleptic
Chemical			
**Crude Protein	32.0% minimum	34.0%	AOAC 930.29
**Crude Fat	18.0% minimum	20.0%	AOAC 932.06
**Crude Fiber	1.5% maximum	1.0%	AOAC 962.09
Lactose		10.0%	AOAC 980.13
Ash		6.0%	AOAC 930.30
Moisture		6.0%	AOAC 927.05
M.E. (calculated)		4,480kcal/kg	Atwater
M.E. (calculated)		2,032kcal/lb	Atwater
**Denotes analyses that are included on certificate of analysis			

Ingredient Statement:

Dried cheese product (per AAFCO 54.32), Dried Cheese (per AAFCO 54.31), colour added.

Country of Origin:

Cheese Plus Cheese is manufactured from materials originating in the United States.



Manufacturing:

Cheese Plus cheese is manufactured in accordance with feed standards of the United States Food and Drug Administration.

Packaging:

25kg or 50-lb poly-lined paper bags, totes, or bulk.

Storage and Shelf Life:

The shelf life of Cheese Plus cheese is 12 months from date of manufacture. This date may be amended based on country and customer requirements. To achieve maximum shelf life, the following storage guidelines must be followed:

- Product container integrity maintained
- Product stored on pallets, off the floor and out of contact with walls and ceilings
- Product stored in an area free from strong or objectionable odors
- Product stored at an average temperature below 70°F/21°C and relative humidity below 65%



**NUTRITIONAL PROFILE
CHEESE PLUS CHEESE PRODUCT**

Essential Amino Acids:	Typical Value %	Digestible Amino Acid %
Arginine.....	1.39	1.27
Cysteine.....	0.54	0.49
Histidine.....	0.80	0.75
Isoleucine.....	1.62	1.45
Leucine.....	4.49	4.22
Lysine.....	3.00	2.70
Methionine.....	0.64	0.60
Phenylalanine.....	1.97	1.86
Threonine.....	1.23	1.10
Tryptophan.....	0.37	0.35
Tyrosine.....	1.54	1.45
Valine.....	1.77	1.60

Minerals:	Typical Value %
Calcium.....	0.30
Phosphorus.....	0.52
Potassium.....	0.82
Magnesium.....	0.08
Sodium.....	1.18
Chloride.....	1.82

Fatty Acid Profile	As % of Fat
C10:0 Capric.....	1.20
C12:0 Lauric.....	3.44
C14:0 Myristic.....	4.91
C16:0 Palmitic.....	22.52
C16:1 Palmitoleic.....	2.84
C18:0 Stearic.....	18.15
C18:1 Oleic.....	33.69
C18:2 Linoleic.....	10.31
C18:3 Linolenic.....	2.01