



NATIONAL LISTING OF APPROVED INGREDIENTS FOR FEEDMILLS IN NIGERIA



NIAS/RA/LAFI-2019

CLASS	INGREDIENTS	Moisture%(max)	Crude Protein%(min)	Energy ME(Kcal/Kg)(min)	Ether Extract(Oil)%(max)	Crude Fiber %(max)	Lysine %(min)	Methionine %(min)	Calcium %	Phosphorus %(Available)	REMARK
ENERGY	Maize (White)	12	7.0	3150	4.0	3.0	0.2	0.15	0.02	0.27	
	Maize (Yellow)	12	7.0	3150	4.0	3.0	0.2	0.15	0.02	0.27	
	Guinea Corn (White)	10	8.0	3100	3.0	5.0	0.21	0.16	0.04	0.32	
	Guinea Corn (Yellow)	10	8.0	3100	3.0	5.0	0.21	0.16	0.04	0.32	
	Millet	12	10.0	2560	4.00	8.0	0.40	0.18	0.02	0.10	
	Whole Wheat	11	10.0	3200	1.6	2.8	0.32	0.17	0.05	0.4	
	Wheat Flour	11	15.0	3040	1.5	1.0	-	-	-	-	
	Cassava Chips/Flour	10	2.5	3000	0.50	3.50	0.07	0.02	0.20	0.03	
	Cassava Grits	10	5.0	2850	0.5	5.0	0.07	0.03	0.2	0.03	
	<b>Cassava Starch</b>	10.0	2.0	2800	1.0	2.0					
	Vegetable Oil	1	-	7800	97	-	-	-	-	-	
	Refined Soya Oil	1	-	7800	97	-	-	-	-	-	
	Fish Oil	1	-	7800	97	-	-	-	-	-	
	<b>Soya Oil</b>	-	-	8370	-	-	-	-	-	-	<b>Peroxide Value=21.38 Meq/Peroxide /Kg</b>
	<b>Palm Oil</b>	-	-	7710	-	-	-	-	-	-	<b>Peroxide Value=8.35 Meq/Peroxide /Kg</b>
Molasses	25	3.0	2343	0.1	0	-	-	0.8	0.08		
PROTEIN	<b>PLANT SOURCE PROTEINS</b>										
	GROUNDNUT CAKE	10	40	2640	6.00	8.00	1.60	0.48	0.20	0.20	



NATIONAL LISTING OF APPROVED INGREDIENTS FOR FEED IN NIGERIA



NIAS/RA/LAFI-2019

CLASS	INGREDIENTS	Moisture%(max)	Crude Protein%(min)	Energy ME(kcal/kg)(min)	Ether Extract(Oil)%(max)	Crude Fiber %(max)	Lysine %(min)	Methionine %(min)	Calcium %	Phosphorus %(Available)	REMARK	
PROTEIN CONTD	Groundnut Meal	10	42	2550	3.0	8.0	1.60	0.48	0.20	0.20		
	Soybean Meal	10	42	2500	4.5	6.50	2.80	0.59	0.20	0.60		
	Soybean Cake	10	45 44	2950	8.0	8.0	2.80	0.59	0.20	0.60		
	Fullfat Soya (Extruded)	8.0	37	3000	17.00 Min	5.50	2.25	0.49	0.20	0.50		
	Full Fat Soy (Roasted/Toasted)	8.0	37	3100	18.0 Min	5.50	2.25	0.49	0.20	0.50		
	Full Fat Soya (Micronized)	8.0	37	3100	18.0 Min	5.50	2.25	0.49	0.20	0.50		
	Brewers' Yeast	7	30	2420	1.00	3.00	3.40	0.70	0.10	0.46		
	Cottonseed Meal (Delinted, Decorticated and Solvent Extracted)	9	35	2146	2.00	10.00	1.15	0.40	0.25	0.30		
	Cotton Seed Cake (Mechanically pressed)	9	25	2146	5.0	25.0	1.0	0.3	0.15	1.10		
	Roselle Seed Cake (Zobo)	12	29.0	2500	6.0	17.0	1.6	0.45	0.45			
	Sunflower Cake	10	45.40	2320	2.90	12.2	1.0	0.50	0.37	0.16		
	Corn Gluten	10	60	3740	2	2.5	1	1.9	0.02	0.18		
	Wheat Gluten	10	75	3852	6	-	1.39	1.3	-	-		
	<b>Animal Source Protein</b>											
	Fishmeal (72%)	8	70	2900	8.0	1.00	4.50	1.92	6 max	3.00 max		
	Fishmeal (65%)	8	63	2860	7.0	2	3.0	1.0	8 max	5max		
Fish Meal	8	45-55	2700	7.0	2.0	3.0	1.0	10max	7 max			



NATIONAL LISTING OF APPROVED INGREDIENTS FOR FEED IN NIGERIA



NIAS/RA/LAFI-2019

CLASS	INGREDIENTS	Moisture%(max)	Crude Protein%(min)	Energy ME(Kcal/Kg)(min)	Ether Extract(Oil)%(max)	Crude Fiber %(max)	Lysine %(min)	Methionine %(min)	Calcium %	Phosphorus %(Available)	REMARK
	Fish Meal- Analogue*										
	<b>BLOOD MEAL (Spray-dried)**</b>	11	80	3220	1	1	6.9	1	0.28	0.22	
<b>FILLERS/ INDUSTRIAL BY-PRODUCTS</b>	Maize Offal	9	9	2500	2.80	12.00	0.25	0.18	0.01	0.09	
	Sorghum Offal	9	9	2700	5.00	6.00	0.25	0.18	0.01	0.09	
	Wheat Offal	11	15	1870	3.50	8.5	0.90	0.25	0.10	0.30	
	Palm Kernel Meal (Solvent Extracted)	10	15	2175	3.00	15.00	0.64	0.39	0.21	0.16	
	Palm Kernel Cake	10	16	2450	7.5	15.0	0.64	0.39	0.21	0.16	
	Rice Bran	10	12	2860	25.0	9.0	0.50	0.24	0.04	0.46	
	Rice Husk	10	3	1200	1.0	28.0	-	-	-	-	
	<b>Rice Offal (Parboiled)</b>	10	3.5	1200	3.0	36	0.2	0.07	0.16		
	<b>Rice Offal (Un-Parboiled)</b>	10	5.5	1300	3.5	30	0.2	0.07	0.15		
	Brewers Dried Grains	10	18	1980	5.00	15	0.90	0.40	0.20	0.16	
<b>Corn Cobs</b>	11	2.3	528	0.4	35	-	-	0.11	-		
<b>Cassava sifting</b>	13	2	1,800	1.0	20	-	-	-	-		

\*Please note that Fish meal analogue expiration date must be specified (Animal source not exceeding 9 months and 18months for plant source) from date of production and the following document must be provided; material safety data sheet, minimum nutrients specifications, batch number and Health certificate authorized by the country of manufacture

\*\*Please note that Blood Meal is for Fish Feed only with Permission from the Nigerian Institute of Animal Science



NATIONAL LISTING OF APPROVED INGREDIENTS FOR FEED IN NIGERIA

NIAS/RA/LAFI-2019

CLASS	INGREDIENTS	Moisture%(max)	Protein%(min)	Energy	Ether Extract(Oil)		Lysine %(min)	Methionine	Threonine	Tryptophan	Isoleucine	Valine	Calcium %	Phosphorus	REMARK
		Crude		ME(Kcal/Kg)(min)	%(max)	Crude fiber	Crude fiber	%(min)	%(min)	%(min)	%(min)	%(min)	%(Available)		
MICRO INGREDIENTS	Lysine						94								
	L Lysine														
	Lysine HCL														
	Lysine SO <sub>4</sub>														
	Liquid lysine														
	Methionine							100							
	L-Methionine														
	DL-Methionine														
	Liquid Methionine	12						88							
	Methionine Hydroxyl							84					12		
	Analogue (MHA)														
	<b>Threonine</b>									98.5					
	<b>Tryptophan</b>										98.5				
	<b>Isoleucine</b>											93.4			
	<b>Valine</b>												98.0		



NATIONAL LISTING OF APPROVED INGREDIENTS FOR FEED IN NIGERIA



NIAS/RA/LAFI-2019

CLASS	INGREDIENTS	Moisture%(max)	Crude Protein%(min)	Energy ME(Kcal/Kg)(min)	Ether Extract(Oil)%(max)	Crude Fiber %(max)	Lysine %(min)	Methionine %(min)	Calcium % (min)	Phosphorus %(Available)	REMARK
MACRO MINERALS	Bone Meal								28	13	
	Oyster Shell								35.00		
	Periwinkle Shell								32.0		
	Limestone								35.00		
	Dicalcium Phosphate(DCP)*								22.00	18.00	
	Copper sulphate										
	Salt										
VITAMINS& MICRO MINERALS	SEE SEPARATE TABLE NEXT PAGE										
Additives**	Enzymes										
	Anti mould										
	Emulsifier										
	Toxin binders										
	Acidifiers										
	Prebiotics										
	Probiotics										
	Synbiotics										
	Pellet Binder										

\*Manufacturers to provide a brief write-up on process of production stating difference from rock phosphate

\*\* Manufacturers to give specifications



**VITAMINS AND MICRO MINERALS**

	<b>SOURCE</b>	<b>POTENCY (MIN)</b>
<b>VITAMINS</b>		
Vitamin A	Vitamin A 500	500,000IU/g
	Vitamin AD <sub>3</sub> 500/100	500,000IU/g of Vit A; 100,000IU/g of VitD <sub>3</sub>
	Vitamin AD <sub>3</sub> 1000/200 O	1,000,000,000IU/g of Vit A; 200,000IU/g of VitD <sub>3</sub>
Vitamin D	Vitamin D <sub>3</sub>	500,000IU/g
	Vitamin AD <sub>3</sub>	500,000IU/g of Vit A; 100,000IU/g of VitD <sub>3</sub>
	Vitamin AD <sub>3</sub>	1,000,000,000IU/g of Vit A; 200,000IU/g of VitD <sub>3</sub>
Vitamin E	Vitamin E 50	500 IU /g
Vitamin K	Vitamin K <sub>3</sub>	50%
Vitamin B <sub>2</sub> (Riboflavin)	Vitamin B <sub>2</sub>	80%
Vitamin B <sub>12</sub>	Vitamin B <sub>12</sub>	1%
Vitamin B <sub>6</sub> Pyridoxine HCl	Vitamin B <sub>6</sub>	100%
Nicotinic Acid	Nicotinic Acid	100%
	Nicotinamide	100%
Folic Acid	Folic Acid	45%
	Folic Acid	95%
Pantothenic Acid	Calcium Pantothenate	80%
		98%
Biotin	Biotin	2% & 5%
Thiamine (Vit B <sub>1</sub> )	Thiamine	98%
Vitamin C	Vitamin C (Aqua)	35%
	Vitamin C (Coated)	98-100



NATIONAL LISTING OF APPROVED INGREDIENTS FOR FEED IN NIGERIA

NIAS/RA/LAFI-2019

Choline	Choline Chloride	50% - 70%
	<b>Liquid choline</b>	<b>60%-75%</b>
	Silica carrier	50%
	Corncob carrier	70%
<b>MICRO MINERALS</b>		
Iodine	Potassium iodate	59%
Copper	Copper Sulphate*	25%
	Organic Copper**	
Manganese	Manganese Oxide	57%
	Manganese Sulphate	31%
	Organic Manganese**	
Zinc	Zinc Oxide	78%
	Zinc Sulphate	35%
	Organic Zinc**	
Iron	Ferrous Carbonate	36%
	Ferrous Sulphate	30%
Selenium	Sodium Selenite	45%
	Organic Selenium**	
Cobalt		20%
<b>ANTI OXIDANT</b>	Butyl Hydroxy Toluene (BHT)	100%
	Butyl Hydroxy Acetate (BHA)	100%
<b>PRESERVATIVES/ANTICAKING AGENTS</b>	Silica	
<b>YOLK COLORANT</b>	Caropyhll	
	Lucantin	
<b>ORGANIC ACID</b>	Formic Acid	
	Butyric Acid	
	Propionic Acid	
	Acetic Acid	

\*Manufacturers to state process of production by explosion.  $CuSO_4$  used in premixes is feed-grade

\*\*Potency of Organic Mineral to be stated by manufacturers