



NATIONAL LISTING OF FEED INGREDIENTS FOR COMMERCIAL FEEDMILLS IN NIGERIA



NIAS/RA/LFI-2016

| 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                    | 3.0                        | 3.0                 | 0.2           | 0.15               | 0.02      | 0.27                     |  |
|         | GUINEA CORN-white            | 10             | 8.0                 | 3300                    | 3.0                        | 5.0                 | 0.21          | 0.16               | 0.04      | 0.32                     |  |
|         | Yellow                       | 10             | 8.0                 | 3300                    | 3.0                        | 5.0                 | .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             | 13.0                | 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(with peel)     | 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                     |  |
|         | <b>CASSAVA SIFTING</b>       | 13             | 2                   | 1,800                   | 1.0                        | 20                  | -             | -                  | -         | -                        |  |
| PROTEIN | <b>PLANT SOURCE PROTEINS</b> |                |                     |                         |                            |                     |               |                    |           |                          |  |
|         | GROUNDNUT CAKE               | 10             | 40                  | 2640                    | 6.00                       | 8.00                | 1.60          | 0.48               | 0.20      | 0.20                     |  |

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|---------------|---|----------------|---------------------|-------------------------|--------------------------|---------------------|---------------|-------------------|-----------|--------------------------|--------|
| 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                  | 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 soya-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 (de linted, decorticated and solvent extracted) | 9              | 35                  | 2146                    | 4.50                     | 10.00               | 1.15          | 0.40              | 0.25      | 0.30                     |        |
|               | Cotton seed cake(Ruminants)                                     | 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  | -              | 75                  | 3852                    | 6                        | -                   | 1.39          | 1.3               | -         | -                        |        |
|               | ANIMAL SOURCE PROTEIN   |                |                     |                         |                          |                     |               |                   |           |                          |        |
|               | FISHMEAL (72%)  | 8              | 72                  | 2900                    | 8.0                      | 1.00                | 4.50          | 1.92              | 6 max     | 3.00 max                 |        |
|               | FISHMEAL 65%  | 8              | 65                  | 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                    |        |

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|-------------------------------------|--|----------------|---------------------|-------------------------|----------------------------|---------------------|---------------|--------------------|-----------|--------------------------|--------|
|                                     | *FISH MEAL-ANALOGUE                    |                |                     |                         |                            |                     |               |                    |           |                          |        |
|                                     | <b>*BLOOD MEAL</b>                     | 11             | 80                  | 3220                    | 1                          | 1                   | 6.9           | 1                  | 0.28      | 0.22                     |        |
| FILLERS/<br>INDUSTRIAL<br>BY PRDCTS | MAIZE OFFALS                           | 9              | 9                   | 2500                    | 2.80                       | 12.00               | 0.25          | 0.18               | 0.01      | 0.09                     |        |
|                                     | SORGUM OFFALS                          | 9              | 9                   | 2700                    | 5.00                       | 6.00                | 0.25          | 0.18               | 0.01      | 0.09                     |        |
|                                     | WHEAT OFFALS                           | 11             | 15                  | 1870                    | 3.50                       | 8.5                 | 0.90          | 0.25               | 0.10      | 0.30                     |        |
|                                     | PALM KERNEL MEAL-<br>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<br>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      | -                        |        |
|                                     |  |                |                     |                         |                            |                     |               |                    |           |                          |        |
| MICRO<br>INGREDIENTS                | LYSINE                                 |                |                     |                         |                            |                     |               | 94                 |           |                          |        |
|                                     | METHIONINE                             |                |                     |                         |                            |                     |               | 100                |           |                          |        |
|                                     | Liquid methionine                      | 12             |                     |                         |                            |                     |               | 88                 |           |                          |        |
|                                     | Methionine Hydroxyl<br>Analogue (MHA)  |                |                     |                         |                            |                     |               | 84                 | 12        |                          |        |

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|--------------------------|----------------------------|----------------|---------------------|-------------------------|--------------------------|--------------------|---------------|-------------------|-----------|-------------------------|--------|
| Macro minerals           | BONE MEAL                  |                |                     |                         |                          |                    |               |                   | 35.00     | 15                      |        |
|                          | OYSTER SHELL               |                |                     |                         |                          |                    |               |                   | 35.00     |                         |        |
|                          | Periwinkle shell           |                |                     |                         |                          |                    |               |                   | 32.0      |                         |        |
|                          | LIMESTONE                  |                |                     |                         |                          |                    |               |                   | 35.00     |                         |        |
|                          | DICALCIUM PHOSPHATE        |                |                     |                         |                          |                    |               |                   | 22.00     | 18.00                   |        |
|                          | SALT                       |                |                     |                         |                          |                    |               |                   |           |                         |        |
| VITAMINS& MICRO MINERALS | SEE SEPARATE TABLE BELOW** |                |                     |                         |                          |                    |               |                   |           |                         |        |
| Additives                | Enzymes                    |                |                     |                         |                          |                    |               |                   |           |                         |        |
|                          | Anti mould                 |                |                     |                         |                          |                    |               |                   |           |                         |        |
|                          | Toxin binders              |                |                     |                         |                          |                    |               |                   |           |                         |        |
|                          | Acidifiers                 |                |                     |                         |                          |                    |               |                   |           |                         |        |
|                          | Pro biotic                 |                |                     |                         |                          |                    |               |                   |           |                         |        |
|                          | Pellet Binder              |                |                     |                         |                          |                    |               |                   |           |                         |        |

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**\*\*VITAMINS AND MICRO MINERALS**

|                           | SOURCE               | POTENCY (MIN)  |
|---------------------------|----------------------|--|
| VITAMINS                  |                      |  |
| Vitamin A                 | Vitamin A 500        | 500,000iu/g  |
|                           | Vitamin AD3 500/100  | 500,000iu/g of Vit A;<br>100,000iu/g of Vit D3       |
|                           | Vitamin AD3 1000/200 | 1,000,000,000iu/g of Vit A;<br>200,000iu/g of Vit D3 |
| Vitamin D                 | Vitamin D3           | 500,000iu/g  |
|                           | Vitamin AD3          | 500,000iu/g of Vit A;<br>100,000iu/g of Vit D3       |
|                           | VITAMIN AD3          | 1,000,000,000iu/g of Vit A;<br>200,000iu/g of Vit D3 |
| Vitamin E                 | Vitamin E 50         | 500 iu /g  |
| VITAMIN K                 | VITAMIN K3           | 50%  |
| Vitamin B2 (RIBOFLAVIN)   | VITAMIN B2           | 80%  |
| VITAMIN B12               | Vitamin B12          | 1%   |
| VITAMIN B6 Pyridoxine HCL | Vitamin B6           | 100%   |
| NICOTINIC ACID            | Nicotinic Acid       | 100%   |
|                           | Nicotinamide         | 100%   |
| FOLIC ACID                | Folic Acid           | 45%  |
|                           | Folic Acid           | 95%  |
| PANTHOTHENIC ACID         | Calcium Pantothenate | 80%  |
|                           |                      | 98%  |
| Biotin                    | Biotin               | 2% , 5% & 10%  |
| THIAMINE (VIT B1)         | Thiamine             | 98%  |
| VITAMIN C                 | Vitamin C (AQUA)     | 35%  |
|                           | Vitamin C (COATED)   | 98-100   |

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|                                 |                    |               |
|---------------------------------|--------------------|---------------|
| CHOLINE                         | CHOLINE CHLORIDE   | 50% 60% & 70% |
|                                 |                    | 80%           |
| MICRO MINERALS                  |                    |               |
| Iodine                          | Potassium Iodide   | 59%           |
| COPPER                          | Copper Sulphate    | 25%           |
|                                 | *Organic Copper    |               |
| MANGANESE                       | Manganese Oxide    | 57%           |
|                                 | Manganese Sulphate | 31%           |
|                                 | *Organic Manganese |               |
| ZINC                            | ZINC OXIDE         | 78%           |
|                                 | ZINC SULPHATE      | 35%           |
|                                 | ZINC               |               |
|                                 | *ORGANIC ZINC      |               |
| IRON                            | FERROUS CARBONATE  | 36%           |
|                                 | FERROUS SULPHATE   | 30%           |
| SELENIUM                        | SODIUM SELENITE    | 45%           |
|                                 | *Organic Selenium  |               |
|                                 |                    |               |
| COBALT                          |                    | 20%           |
| ANTI OXIDANT                    | BUTYL HYDROXY      |               |
|                                 | TOLUENE (BHT)      | 100%          |
|                                 | BHA                | 100%          |
| PRESERVATIVES/ANTICAKING AGENTS | SILICA             |               |
|                                 |                    |               |
| YOLK COLORANT                   | CAROPYHL           |               |
|                                 | LUCANTIN           |               |

\*Potency of Organic Mineral to be stated

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