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| **Vitamin Premix Specification Form with Phytase**  Last updated January, 2023 | | | | | | |
| Name:  Address:    Phone:  Email:  Date needed: | | | | | Product name: Vitamin Premix with Phytase    Quantity, lb Package size, lb  Use level, lb/ton Nursery diets: 5 lb  Grower diets: 3 lb  Finisher diets: 1.5 to 2.5 lb  Price desired (circle one) $/lb FOB  $/lb Delivered | |
| **Nutrient** | | **Units** | | **Guaranteed Potency per lb of premix** | | **Sources** |
| Vitamin A | | IU | | 750,000 | | Vitamin A acetate (retinyl acetate) supplied by cross-linked beadlet |
| Vitamin D | | IU | | 300,000 | | Vitamin D3 (cholecalciferol) with at least 50% supplied by a vitamin A/D3 cross-linked beadlet |
| Vitamin E (Pick one source and provide source with quotation) | | mg | | 8,000 | | dl--tocophorol acetate |
| mg | | 4,000 | | d--tocophorol acetate (Natural vitamin E) |
| Vitamin K (menadione) | | mg | | 600 | | MPB (Menadione dimethylpyrimidinol bisulfite) or MNB |
| Vitamin B12 | | mg | | 6 | | Cyanocobalamin |
| Niacin | | mg | | 9,000 | | Niacinamide, Nicotinic acid |
| Pantothenic acid | | mg | | 5,000 | | d-calcium pantothenate |
| Riboflavin | | mg | | 1,500 | | Crystalline riboflavin |
| Phytase (Pick one source and provide source with quotation) – Must use guaranteed phytase level provided by the phytase manufacturer. | | FTU or FYT | | 235,870 | | Axtra PHY GOLD (Dupont); |
| 568,502 | | Empirical (ADM) |
| 1,070,489 | | Grainzyme (Agrivida) |
| 350,782 | | Natuphos E 5,000 G (BASF) |
| 429,405 | | OptiPhos Plus (Huevepharma) |
| 290,302 | | Quantum Blue G (AB Vista) |
| 598,748 | | Ronozyme Hi-Phos GT (DSM) |
| 834,619 | | Smizyme Thermostable (Origination) |
| 985,600 | | Sunphase HT (Wuhan Sunhy Biology Co.) |
| Antioxidant | | ppm | | 150 | | Ethoxyquin |
| Carrier | |  | |  | | 50:50 mixture of rice hulls and limestone |
| Oil | | % | |  | | Mineral or vegetable |
| The following points must be followed unless approval for changes have been made:   1. Guaranteed to stay free-flowing, lump free, non-dusty and packaged in multi-wall, poly-lined paper bags or totes as specified above. 2. The final moisture level will be less than 10% and 99.5% product will flow through a #14 U.S./Canadian screen. 3. Bulk density will be 32 ± 5 lb per cubic foot. Please notify me if oil level or carrier cause a flow problem. 4. All bags or totes must be labeled with tags. Tags should include date of manufacture, lot number, guaranteed analysis, inclusion rate, and proposed use of the product. 5. Formulate using the guaranteed analysis from the supplier for the nutrient. We can request label copies of your ingredients and copies of your mixing records to show quantities of ingredients per batch. Permission must be obtained before using other alternative sources for any ingredient.\ 6. Phytase specifications are based on an expected release of 0.13% STTD P when premix is included in diets at 1.5 lb/ton using release curves reported in the KSU Phytase Release Calculator. | | | | | | |
| **Trace Mineral Premix Specification Form**  Last updated December, 2011 | | | | | | |
| Name:  Address:    Phone:  Email:  Date:  Date Needed: | | | | | Product name: Trace Mineral Premix    Quantity, lb Package size, lb  Use level, lb/ton Nursery diets: 3 lb  Grower diets: 3 lb  Finisher diets: 1.5 to 2.5 lb  Price desired (circle one) $/lb FOB  $/lb Delivered | |
| **Nutrient** | **Guaranteed Potency of premix** | | | | **Sources** | |
| **mg/lb** | | **ppm** | |
| Copper | 5,000 | | 11,000 | | Copper sulfate, Copper chloride | |
| Iodine | 90 | | 198 | | Ca iodate, Ethylenediamine dihydriodide (EDDI) | |
| Iron | 33,300 | | 73,413 | | Ferrous sulfate | |
| Manganese | 10,000 | | 22,046 | | Manganese sulfate,  Manganese oxide | |
| Selenium | 90 | | 198 | | Sodium selenite | |
| Zinc | 33,300 | | 73,413 | | Zinc sulfate | |
| Carrier |  | |  | | Calcium carbonate | |
| Oil |  | |  | | Mineral or vegetable | |
| The following points must be followed unless approval for changes have been made:   1. Guaranteed to stay free-flowing, lump free with little dust, and packaged in multi-wall, poly-lined paper bags or totes as specified above. 2. All bags or totes must be labeled with tags. Tags should include date of manufacture, lot number, guaranteed analysis, inclusion rate, and proposed use of the product. 3. Formulate using the guaranteed analysis from the supplier for the nutrient. We can request label copies of your ingredients and copies of your mixing records to show quantities of ingredients per batch. 4. Trace mineral sources must comply with the AFIA Mineral Handbook as to maximum levels of arsenic, mercury, cadmium, and lead. 5. Permission must be obtained before using other alternative sources for any ingredient. | | | | | | |

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| **Sow VTM Specification Form – Page 1 of 2**  Last updated December, 2021 | | | | |
| Name:  Address:    Phone:  Email:  Date Needed: | | | Product name: Sow VTM Premix    Quantity, lb Package size, lb  Use level, lb/ton Sow diets: 10 lb  Price desired (circle one) $/lb FOB  $/lb Delivered | |
| **Nutrient** | **Units** | **Guaranteed Potency per lb of premix** | | **Sources** |
| Vitamin A | IU | 750,000 | | Vitamin A acetate (retinyl acetate) supplied by cross-linked beadlet |
| Vitamin D (Pick one source and provide source with quotation) | IU | 150,000 | | Vitamin D3 (cholecalciferol) with at least 50% supplied by a vitamin A/D3 cross-linked beadlet |
| mg | 4.54 | | 25-OH D3 (Hy-D) |
| Vitamin E (Pick one source and provide source with quotation) | IU | 6,000 | | dl--tocophorol acetate |
| IU | 3,000 | | d--tocophorol acetate (Natural vitamin E) |
| Vitamin K (menadione) | mg | 300 | | MPB (Menadione dimethylpyrimidinol bisulfite) or MNB |
| Vitamin B12 | mg | 3 | | Cyanocobalamin |
| Niacin | mg | 4,500 | | Niacinamide, Nicotinic acid |
| Pantothenic acid | mg | 2,500 | | d-calcium pantothenate |
| Riboflavin | mg | 750 | | Crystalline riboflavin |
| Biotin | mg | 20 | | Spray dried biotin |
| Folic Acid | mg | 200 | | Folic acid |
| Pyridoxine | mg | 90 | | Pyridoxine HCl |
| Choline | mg | 50,000 | | Choline Cl |
| Carnitine | mg | 4,500 | | L-carnitine |
| Chromium | mg | 18 | | Chromium picolinate |
| Copper | mg | 1,500 | | Copper sulfate, Copper chloride |
| Iodine | mg | 27 | | Ca iodate, Ethylenediamine dihydriodide (EDDI) |
| Iron | mg | 10,000 | | Ferrous sulfate |
| Manganese | mg | 3,000 | | Manganese sulfate, Manganese oxide |
| Selenium | mg | 27 | | Sodium selenite |
| Zinc | mg | 10,000 | | Zinc sulfate |
| Phytase (Pick one source and provide source with quotation) – Must use guaranteed phytase level provided by the phytase manufacturer. | FTU or FYT | 70,761 | | Axtra PHY GOLD (Dupont); |
| 170,550 | | Empirical (ADM) |
| 321,147 | | Grainzyme (Agrivida) |
| 105,235 | | Natuphos E 5,000 G (BASF) |
| 128,822 | | OptiPhos Plus (Huevepharma) |
| 87,091 | | Quantum Blue G (AB Vista) |
| 179,624 | | Ronozyme Hi-Phos GT (DSM) |
| 250,386 | | Smizyme Thermostable (Origination) |

**Sow VTM Specification Form – Page 2 of 2**

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| Antioxidant | ppm | 150 | Ethoxyquin |
| Carrier |  |  | 50:50 mixture of rice hulls and limestone |
| Oil | % |  | Mineral or vegetable |
| The following points must be followed unless approval for changes have been made:   1. Guaranteed to stay free-flowing, lump free, non-dusty and packaged in multi-wall, poly-lined paper bags or totes as specified above. 2. Please notify if oil level or carrier cause a flow problem. 3. All bags or totes must be labeled with tags. Tags should include date of manufacture, lot number, guaranteed analysis, inclusion rate, and proposed use of the product. 4. Formulate using the guaranteed analysis from the supplier for the nutrient. We can request label copies of your ingredients and copies of your mixing records to show quantities of ingredients per batch. batch. 5. Trace mineral sources must comply with the AFIA Mineral Handbook as to maximum levels of arsenic, mercury, cadmium, and lead. 6. Chelated or hydroxy trace minerals can replace a portion or all of the listed inorganic sources listed for improved stability of the vitamins in the premix and for lameness and reproduction. Replacement should be on an equal mg basis. Permission must be obtained before using other alternative sources for any ingredient. | | | |