



# Premix, Base Mix and Starter Diet Recommendations for Swine

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## Vitamin Premix Specification Form with Phytase

Name: \_\_\_\_\_

Product name: Vitamin Premix with Phytase

Address: \_\_\_\_\_

Quantity, lb \_\_\_\_\_

Package size, lb \_\_\_\_\_

Phone: \_\_\_\_\_

Use level, lb/ton Sow diets: 5 lb

Nursery diets: 5 lb

Grower diets: 3 lb

Finisher diets: 1.5 to 2.5 lb

Fax: \_\_\_\_\_

Date: \_\_\_\_\_

Price desired (circle one)

\$/lb FOB

Date Needed: \_\_\_\_\_

\$/lb Delivered

Nutrient	Units	Guaranteed Potency per lb of premix	Sources
Vitamin A	IU	2,000,000	Vitamin A acetate (retinyl acetate)
Vitamin D	IU	300,000	Vitamin D <sub>3</sub> (cholecalciferol)
Vitamin E	IU	8,000	dl- $\alpha$ -tocophorol acetate or d- $\alpha$ -tocophorol acetate
Vitamin K (menadione)	mg	800	MPB (Menadione dimethylpyrimidinol bisulfite) or MNB
Vitamin B <sub>12</sub>	mg	7	Cyanocobalamin
Niacin	mg	9,000	Niacinamide, Nicotinic acid
Pantothenic acid	mg	5,000	d-calcium pantothenate
Riboflavin	mg	1,500	Crystalline riboflavin
Phytase	FTU	90,700	Natuphos
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:

- a) Guaranteed to stay free-flowing, lump free, non-dusty and packaged in multi-wall, poly-lined paper bags or totes as specified above.
- b) The final moisture level will be less than 10% and 99.5% product will flow through a #14 U.S./Canadian screen.
- c) Bulk density will be 32  $\pm$  5 lb per cubic foot. Please notify me if oil level or carrier cause a flow problem.
- d) 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.
- e) 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.

## Trace Mineral Premix Specification Form

Name: \_\_\_\_\_

Product name: Trace Mineral Premix

Address: \_\_\_\_\_

Quantity, lb \_\_\_\_\_

Package size, lb \_\_\_\_\_

Phone: \_\_\_\_\_

Use level, lb/ton Sow diets: 3 lb

Nursery diets: 3 lb

Grower diets: 3 lb

Finisher diets: 1.5 to 2.5 lb

Fax: \_\_\_\_\_

Date: \_\_\_\_\_

Price desired (circle one)

\$/lb FOB

Date Needed: \_\_\_\_\_

\$/lb Delivered

Nutrient	Units	Guaranteed Potency per lb of premix	Sources
Copper	G	5	Copper sulfate, Copper chloride
Iodine	mg	90	Ca iodate, Ethylenediamine dihydriodide (EDDI)
Iron	g	50	Ferrous sulfate
Manganese	g	12	Manganese sulfate, Manganese oxide
Selenium	mg	90	Sodium selenite
Zinc	g	50	Zinc sulfate
Carrier	%		Calcium carbonate
Oil	%		Mineral or vegetable

The following points must be followed unless approval for changes have been made:

- a) Guaranteed to stay free-flowing, lump free with little dust, and packaged in multi-wall, poly-lined paper bags or totes as specified above.
- b) 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.
- c) 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.
- d) Trace mineral sources must comply with the AFIA Mineral Handbook as to maximum levels of arsenic, mercury, cadmium, and lead.

## Vitamin Premix Specification Form – Sow Add Pack

Name: \_\_\_\_\_

Product name: Sow Add Pack

Address: \_\_\_\_\_

Quantity, lb \_\_\_\_\_

Package size, lb \_\_\_\_\_

Phone: \_\_\_\_\_

Use level, lb/ton Sow diets: 5 lb

Nursery diets:

Grower diets:

Finisher diets:

Fax: \_\_\_\_\_

Date: \_\_\_\_\_

Price desired (circle one)

\$/lb FOB

Date Needed: \_\_\_\_\_

\$/lb Delivered

Nutrient	Units	Guaranteed Potency per lb of premix	Sources
Biotin	mg	40	Biotin
Folic Acid	mg	300	Folic acid
Pyridoxine	mg	900	Pyridoxine HCl
Choline	mg	100,000	Choline Cl
Carnitine	mg	9,000	L-carnitine
Chromium	mg	36	Chromium picolinate
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:

- a) Guaranteed to stay free-flowing, lump free, non-dusty and packaged in multi-wall, poly-lined paper bags or totes as specified above.
- b) The final moisture level will be less than 10% and 99.5% product will flow through #14 U.S./Canadian screen.
- c) Bulk density will be  $32 \pm 5$  lb per cubic foot. Please notify me if oil level or carrier cause a flow problem.
- d) 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.
- e) 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.

## Starter Base Mix Specification – Page 1 of 2

Name: \_\_\_\_\_ Product name: Starter Base Mix with phytase

Address: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Quantity, lb \_\_\_\_\_ Package size, lb \_\_\_\_\_

Phone: \_\_\_\_\_ Use level, lb/ton Sow diets: \_\_\_\_\_  
 Nursery diets: 50 lb  
 Grower diets: \_\_\_\_\_  
 Finisher diets: \_\_\_\_\_

Fax: \_\_\_\_\_

Date: \_\_\_\_\_ Price desired (circle one) \$/ton FOB  
 \$/ton Delivered

Date Needed: \_\_\_\_\_

Amino acids	Units	Guaranteed Potency per Lb of Base Mix	Sources
Lysine	%	4.7	Lysine HCl
Methionine	%	2.0	DL-Methionine
Vitamins	Units	Guaranteed Potency per Lb of Base Mix	Sources
Vitamin A	IU	200,000	Vitamin A acetate (retinyl acetate)
Vitamin D	IU	30,000	Vitamin D <sub>3</sub> (cholecalciferol)
Vitamin E	IU	800	d- $\alpha$ -tocophorol acetate or d- $\alpha$ -tocophorol acetate
Vitamin K (menadione)	mg	80	MPB (Menadione dimethylpyrimidinol bisulfite) or MNB
Vitamin B <sub>12</sub>	mg	0.70	Cyanocobalamin
Niacin	mg	900	Niacinamide, Nicotinic acid
Pantothenic acid	mg	500	d-calcium pantothenate
Riboflavin	mg	150	Crystalline riboflavin
Minerals	Units	Guaranteed Potency per Lb of Base Mix	Sources
Copper	mg	300	Copper sulfate
Iodine	mg	5.4	Ca iodate, Ethylenediamine dihydriodide (EDDI)
Iron	mg	3,000	Ferrous sulfate
Manganese	mg	720	Manganese sulfate, manganese oxide
Selenium	mg	5.4	Sodium selenite
Zinc	mg	3,000	Zinc sulfate
Calcium (Minimum)	%	18.5	Calcium carbonate, monocalcium phosphate, or dicalcium phosphate
(Maximum)	%	20.0	
Available phosphorus	%	7.5	Monocalcium phosphate or dicalcium phosphate
NaCl (Minimum)	%	14.0	Feed or food-grade salt
(Maximum)	%	15.0	

**Starter Base Mix Specification – Page 2 of 2**

<b>Other</b>	<b>Units</b>	<b>Guaranteed Potency per Lb of Base Mix</b>	<b>Sources</b>
Phytase	FTU	9,070	Natuphos
Carrier			
Oil	%		Mineral or vegetable
<p>The following points must be followed unless approval for changes have been made:</p> <ul style="list-style-type: none"> <li>a) Guaranteed to stay free-flowing, lump free, and non-dusty.</li> <li>b) The final moisture level will be less than 10% and 98% product will flow through #20 U.S./Canadian screen.</li> <li>c) When bagged, all bags must be labeled with tags. Tags should include date of manufacture, lot number, guaranteed analysis, inclusion rate, and proposed use of the product.</li> <li>d) 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.</li> <li>e) Permission must be obtained before using an alternative source for any ingredient.</li> </ul>			

## Grow-Finish Base Mix Specification – Page 1 of 2

Name: \_\_\_\_\_ Product name: GF Base Mix with lysine & phytase

Address: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

Date: \_\_\_\_\_

Date Needed: \_\_\_\_\_

Quantity, lb \_\_\_\_\_ Package size, lb \_\_\_\_\_

Use level, lb/ton Sow diets: \_\_\_\_\_  
 Nursery diets: \_\_\_\_\_  
 Grower diets: 50  
 Finisher diets: 35-40

Price desired (circle one) \$/ton FOB \_\_\_\_\_  
 \$/ton Delivered \_\_\_\_\_

Amino acids	Units	Guaranteed Potency per Lb of Base Mix	Sources
Lysine	%	4.70	Lysine HCl
Vitamins	Units	Guaranteed Potency per Lb of Base Mix	Sources
Vitamin A	IU	120,000	Vitamin A acetate (retinyl acetate)
Vitamin D	IU	18,000	Vitamin D <sub>3</sub> (cholecalciferol)
Vitamin E	IU	480	dl- $\alpha$ -tocophorol acetate or d- $\alpha$ -tocophorol acetate
Vitamin K (menadione)	mg	48	MPB (Menadione dimethylpyrimidinol bisulfite) or MNB
Vitamin B <sub>12</sub>	mg	0.42	Cyanocobalamin
Niacin	mg	540	Niacinamide, Nicotinic acid
Pantothenic acid	mg	300	d-calcium pantothenate
Riboflavin	mg	90	Crystalline riboflavin
Minerals	Units	Guaranteed Potency per Lb of Base Mix	Sources
Copper	mg	300	Copper sulfate
Iodine	mg	5.4	Ca iodate, Ethylenediamine dihydriodide (EDDI)
Iron	mg	3,000	Ferrous sulfate
Manganese	mg	720	Manganese sulfate, manganese oxide
Selenium	mg	5.4	Sodium selenite
Zinc	mg	3,000	Zinc sulfate
Calcium (Minimum)	%	20.5	Calcium carbonate, monocalcium phosphate, or dicalcium phosphate
(Maximum)	%	22.5	
Available phosphorus	%	6.3	Monocalcium phosphate or dicalcium phosphate
NaCl (Minimum)	%	17.0	Feed or food-grade salt
(Maximum)	%	20.0	

## Grow-Finish Base Mix Specification – Page 2 of 2

	Units	Guaranteed Potency per Lb of Base Mix	Sources
Phytase	FTU	5,442	Natuphos
Carrier			
Oil	%		Mineral or vegetable
<p>The following points must be followed unless approval for changes have been made:</p> <ul style="list-style-type: none"> <li>a) Guaranteed to stay free-flowing, lump free, and non-dusty.</li> <li>b) The final moisture level will be less than 10% and 98% product will flow through #20 U.S./Canadian screen.</li> <li>c) When bagged, all bags must be labeled with tags. Tags should include date of manufacture, lot number, guaranteed analysis, inclusion rate, and proposed use of the product.</li> <li>d) 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.</li> <li>e) Permission must be obtained before using an alternative source for any ingredient.</li> </ul>			

## Sow Base Mix Specification – Page 1 of 2

Name: \_\_\_\_\_

Product name: Sow Base Mix with phytase

Address: \_\_\_\_\_

Quantity, lb \_\_\_\_\_

Package size, lb \_\_\_\_\_

Phone: \_\_\_\_\_

Use level, lb/ton Sow diets: 70

Nursery diets: \_\_\_\_\_

Grower diets: \_\_\_\_\_

Fax: \_\_\_\_\_

Finisher diets: \_\_\_\_\_

Date: \_\_\_\_\_

Price desired (circle one)

\$/ton FOB

Date Needed: \_\_\_\_\_

\$/ton Delivered

Vitamins	Units	Guaranteed Potency per Lb of Base Mix	Sources
Vitamin A	IU	140,000	Vitamin A acetate (retinyl acetate)
Vitamin D	IU	21,000	Vitamin D <sub>3</sub> (cholecalciferol)
Vitamin E	IU	570	d- $\alpha$ -tocophorol acetate or d- $\alpha$ -tocophorol acetate
Vitamin K (menadione)	mg	57	MPB (Menadione dimethylpyrimidinol bisulfite) or MNB
Vitamin B <sub>12</sub>	mg	0.50	Cyanocobalamin
Niacin	mg	640	Niacinamide, Nicotinic acid
Pantothenic acid	mg	350	d-calcium pantothenate
Riboflavin	mg	105	Crystalline riboflavin
Choline	mg	7,100	Choline chloride
Biotin	mg	2.85	Biotin
Folacin	mg	21	Folic acid
Pyridoxine	mg	60	Pyridoxine HCl
Carnitine	mg	640	L-carnitine
Chromium	mg	2.57	Chromium picolinate
Minerals	Units	Guaranteed Potency per Lb of Base Mix	Sources
Copper	mg	210	Copper sulfate, Copper chloride
Iodine	mg	3.85	Ca iodate, Ethylenediamine dihydriodide (EDDI)
Iron	mg	2,100	Ferrous sulfate
Manganese	mg	514	Manganese sulfate, manganese oxide
Selenium	mg	3.85	Sodium selenite
Zinc	mg	2,100	Zinc sulfate
Calcium (Minimum)	%	18.0	Calcium carbonate, monocalcium phosphate, or dicalcium phosphate
(Maximum)	%	20.5	
Available phosphorus	%	9.9	Monocalcium phosphate or dicalcium phosphate
NaCl (Minimum)	%	14.3	Feed or food-grade salt
(Maximum)	%	15.0	

## Sow Base Mix Specification – Page 2 of 2

Other	Units	Guaranteed Potency per Lb of Base Mix	Sources
Phytase	FTU	6,475	Natuphos
Carrier			
Oil	%		Mineral or vegetable
<p>The following points must be followed unless approval for changes have been made:</p> <ul style="list-style-type: none"> <li>a) Guaranteed to stay free-flowing, lump free, and non-dusty.</li> <li>b) The final moisture level will be less than 10% and 98% product will flow through #20 U.S./Canadian screen.</li> <li>c) When bagged, all bags must be labeled with tags. Tags should include date of manufacture, lot number, guaranteed analysis, inclusion rate, and proposed use of the product.</li> <li>d) 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.</li> <li>e) Permission must be obtained before using an alternative source for any ingredient.</li> </ul>			

## Complete Starter Diet Specification (SEW) – Page 1 of 2

Name: \_\_\_\_\_

Product name: SEW Diet

Address: \_\_\_\_\_

Quantity, lb  
size, lb

Package

Phone: \_\_\_\_\_

Use: To be fed to pigs weighing less than 12 lb as a complete diet.

Fax: \_\_\_\_\_

Price desired (circle one)

\$/ton FOB

Date: \_\_\_\_\_

\$/ton Delivered

Date Needed: \_\_\_\_\_

Ingredients	Units	Guaranteed Potency In Complete Diet	Sources
Spray-dried whey	%	25.0	Edible grade from Land O'Lakes or equivalent
Lactose	%	5.0	Edible grade
Spray-dried animal plasma	%	6.7	American Proteins, DuCoa, Merricks, or North Central Processors
Spray-dried blood meal or cells	%	1.65	American proteins, California Spray Dry, or Merricks
Menhaden fish meal	%	6.0	Special Select Menhaden from Omega Proteins
Corn	Minimum	33.0	
	Maximum	36.0	
Soybean meal, 46.5% protein	%	12.5	
Fat	%	6.0	Soybean oil or choice white grease
Monocalcium phosphate (21% P)	%	0.50	
Limestone (38% Calcium)	%	0.40	
L-lysine HCl	%	0.15	
DL-methionine	%	0.15	
Salt	%	0.25	
Zinc oxide	%	0.375	
Acidifier	%	0.20	Kemgest, Syneracid, or Digest acid

Vitamins	Units	Guaranteed Potency Added per Ton of Complete Feed	Sources
Vitamin A	IU	10,000,000	Vitamin A acetate (retinyl acetate)
Vitamin D	IU	1,500,000	Vitamin D <sub>3</sub> (cholecalciferol)
Vitamin E	IU	40,000	d or dl- $\alpha$ -tocophorol acetate
Vitamin K (menadione)	mg	4,000	MPB (Menadione dimethylpyrimidinol bisulfite) or MNB
Vitamin B <sub>12</sub>	mg	35	Cyanocobalamin
Niacin	mg	45,000	Niacinamide, Nicotinic acid
Pantothenic acid	mg	25,000	d-calcium pantothenate
Riboflavin	mg	7,500	Crystalline riboflavin
Choline	mg	150,000	Choline chloride
Pyridoxine	mg	2,000	Pyridoxine hydrochloride

## Complete Starter Diet Specification (SEW) – Page 2 of 2

<b>Minerals</b>	<b>Units</b>	<b>Guaranteed Potency Added per Ton of Complete Feed</b>	<b>Sources</b>
Copper	g	15	Copper sulfate
Iodine	mg	270	Ca iodate, Ethylenediamine dihydriodide (EDDI)
Iron	g	150	Ferrous sulfate, Ferrous carbonate
Manganese	g	36	Manganese sulfate, manganese oxide
Selenium	mg	270	Sodium selenite
Zinc	g	2,700	<b>Zinc oxide (MUST BE ZINC OXIDE)</b>
<b>Medication</b>			
<b>(As decided by the producer)</b>	<b>Units</b>	<b>Guaranteed Potency Added per Ton of Complete Feed</b>	<b>Sources (Decided by the producer)</b>

The following points must be followed unless approval for changes have been made:

- a) Must be pelleted in 1/8 or 3/32" pellets.
- b) Guaranteed to stay free-flowing, lump free, and non-dusty.
- c) When bagged, all bags must be labeled with tags. Tags should include date of manufacture, lot number, guaranteed analysis, inclusion rate, and proposed use of the product.
- d) 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.
- e) Permission must be obtained before using an alternative source for any ingredient.

## Complete Starter Diet Specification (Transition) – Page 1 of 2

Name: \_\_\_\_\_

Product name: Transition Diet

Address: \_\_\_\_\_

Quantity, lb  
size, lb

Package

Phone: \_\_\_\_\_

Use: To be fed to pigs weighing between 10 and 15 lb as a complete diet.

Fax: \_\_\_\_\_

Price desired (circle one)

\$/ton FOB

Date: \_\_\_\_\_

\$/ton Delivered

Date Needed: \_\_\_\_\_

Ingredients	Units	Guaranteed Potency In Complete Diet	Sources
Spray-dried whey	%	25.0	Edible grade from Land O'Lakes or equivalent
Spray-dried animal plasma	%	2.5	American Proteins, DuCoa, Merricks, North Central Processors
Spray-dried blood meal or cells	%	2.5	American proteins, California Spray Dry or Merricks
Menhaden fish meal	%	2.5	Special Select Menhaden from Omega Proteins
Corn	Minimum %	36.0	
	Maximum %	39.0	
Soybean meal, 46.5% protein	%	20.0	
Fat	%	5.0	Soybean oil or choice white grease
Monocalcium phosphate (21% P)	%	1.10	
Limestone (38% Calcium)	%	0.60	
L-lysine HCl	%	0.15	
DL-methionine	%	0.15	
Salt	%	0.30	
Zinc oxide	%	0.375	
Acidifier	%	0.20	Kemgest, Syneracid, or Digest acid
Vitamins	Units	Guaranteed Potency Added per Ton of Complete Feed	Sources
Vitamin A	IU	10,000,000	Vitamin A acetate (retinyl acetate)
Vitamin D	IU	1,500,000	Vitamin D <sub>3</sub> (cholecalciferol)
Vitamin E	IU	40,000	d or dl- $\alpha$ -tocophorol acetate
Vitamin K (menadione)	mg	4,000	MPB (Menadione dimethylpyrimidinol bisulfite) or MNB
Vitamin B <sub>12</sub>	mg	35	Cyanocobalamin
Niacin	mg	45,000	Niacinamide, Nicotinic acid
Pantothenic acid	mg	25,000	d-calcium pantothenate
Riboflavin	mg	7,500	Crystalline riboflavin
Choline	mg	150,000	Choline chloride
Pyridoxine	mg	2,000	Pyridoxine hydrochloride



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Kansas State University Agricultural Experiment Station and Cooperative Extension Service

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