### Starter Base Mix Specification – Page 1 of 2 Last updated August, 2017

		Last upo	Jaica Augi	331, 2017		
Name:			Pr	oduct name: Starter Bas	e Mix	
Address:			<del>-</del>	romatitus. Un	Doolsono sino Ilh	
				uantity, lb	Package size, lb	
Phone:			Us	se level, lb/ton Sow diets  Nursery diets	s: 65 lb	
Fax:				Finisher diet	S:	
Date:		Price desired (circle one) \$/ton FOB				
Date Needed:					\$/ton Delivered	
Amino acids	Units	Guaranteed per Lb of B		Sources		
Lysine	%	7.25		Lysine HCI		
Methionine	%	5.2		DL-Methionine		
Threonine	%	4.3		L-Threonine		
Vitamins	Units	Guaranteed per Lb of B	Potency	Sources		
Vitamin A	IU	123,0	00	Vitamin A acetate (retin	yl acetate)	
Vitamin D	IU	30,75	50	Vitamin D <sub>3</sub> (cholecalciferol) with at least 50% supplied by a vitamin A/D <sub>3</sub> cross-linked beadlet		
Vitamin E (Pick one	IU	615	5	dl-α-tocophorol acetate		
source and provide source with quotation)	IU	307 c		d-α-tocophorol acetate	(Natural vitamin E)	
Vitamin K (menadione)	mg	61.5	5	MNB (Menadione nicoti	namide bisulfite)	
Vitamin B <sub>12</sub>	mg	0.538		Cyanocobalamin		
Niacin	mg	1150		Niacinamide, Nicotinic a	acid	
Pantothenic acid	mg	380	)	d-calcium pantothenate		
Riboflavin	mg	115	5	Crystalline riboflavin		
		Guaranteed	Potency			
		of Base	-			
Minerals	Units	mg/lb	ppm	Sources		
Copper		230	500	Copper sulfate		
Iodine		4.10	9.1	Ca iodate, Ethylenedian (EDDI)	nine dihydriodide	
Iron		1,535	3,380	Ferrous sulfate		
Manganese		460	1,015	Manganese sulfate, ma	nganese oxide	
Selenium		4.10	9.1	Sodium selenite		
Zinc		1,535	3,380	Zinc sulfate, zinc oxide		
Calcium (Minimum)	%	15.8		Calcium carbonate, mor	nocalcium phosphate,	
(Maximum)	%	17.0	J	or dicalcium phosphate  Monocalcium phosphate	e or dicalcium	
Available phosphorus	%	6.6	ì	phosphate	o or alouiolalli	
NaCl (Minimum)	%	10.0	)			
(Maximum)	%			Feed or food-grade salt		

### Starter Base Mix Specification - Page 2 of 2

Other	Units	Guaranteed Potency per Lb of Base Mix	
Phytase (Pick one source and provide source with	FTU	10,460	Axtra TPT (Dupont)
quotation) – Must use guaranteed phytase level	FTU		OptiPhos PF (Huevepharma); Quantum Blue G (AB Vista)
provided by the phytase manufacturer.	FYT		Ronozyme Hi-Phos GT (DSM); Natuphos E 5,000 G (BASF)
Carrier			
Oil	%		Mineral or vegetable

- a) Guaranteed to stay free-flowing, lump free, and non-dusty.
- b) The final moisture level will be less than 10% and 98% product will flow through #20 U.S./Canadian screen.
- 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.

# Sow Base Mix Specification – Page 1 of 2 Last updated August, 2017 Product name: Sow Base Mix with phyta

Name:			Р	roduct name: <u>Sow Base Mi</u>	x with phytase
Address:			_	According the	Dooleana aina lib
			C	Quantity, lb	Package size, lb
5.			U	se level, lb/ton Sow diets:_	75
Phone:		-		Nursery diets: Grower diets:	
Fax:				Finisher diets:	
Date:		_	Р	rice desired (circle one)	\$/ton FOB
Date Needed:					\$/ton Delivered
		Guaranteed			
Vitamins	Units	per Lb of I	Base Mix	Sources	
Vitamin A	IU	106,0	000	Vitamin A acetate (retinyl	
Vitamin D	IU	26,6	00	Vitamin D <sub>3</sub> (cholecalcifero supplied by a vitamin A/D <sub>3</sub>	
Vitamin E (Pick one	IU	80	0	dl-α-tocophor	ol acetate
source and provide source with quotation)	IU	40	0	d-α-tocophorol acetate	(Natural vitamin E)
Vitamin K (menadione)	mg	53	3	MNB (Menadione nicotina	amide bisulfite)
Vitamin B <sub>12</sub>	mg	0.4	6	Cyanocobalamin	
Niacin	mg	1,00	00	Niacinamide, Nicotinic acid	
Pantothenic acid	mg			d-calcium pantothenate	
Riboflavin	mg			Crystalline riboflavin	
Choline	mg	6,660		Choline chloride	
Biotin	mg	2.6	6	Biotin	
Folacin	mg	20	)	Folic acid	
Pyridoxine	mg	60	)	Pyridoxine HCI	
Carnitine	mg			L-carnitine	
Chromium	mg	2.40		Chromium picolinate	
	1	0	l Datama	Л	
		Guaranteed of Base	•	<b>/</b>	
Minerals	Units	mg/lb		Sources	
Copper		200	440	Copper sulfate, Copper ch	nloride
lodine		3.60	7.9	Ca iodate, Ethylenediamir (EDDI)	ne dihydriodide
Iron		1,330	2,930	Ferrous sulfate	
Manganese		400	880	Manganese sulfate, mang	anese oxide
Selenium		3.60	7.9	Sodium selenite	
Zinc		1,330	2,930	Zinc sulfate, zinc oxide	
Calcium (Minimum)	%	19.	5	_Calcium carbonate, mono	calcium nhosnhate
(Maximum)	%	21.	5	or dicalcium phosphate	carcium priospriate,
,				Monocalcium phosphate	or dicalcium
Available phosphorus	%	9.2		phosphate	
NaCl (Minimum)	%	13.			
(Maximum)	%	14.	U	Feed or food-grade salt	

#### Sow Base Mix Specification – Page 2 of 2

Other	Units	Guaranteed Potency per Lb of Base Mix	Sources
Phytase (Pick one source and provide source with	FTU	9,070	Axtra TPT (Dupont)
quotation) – Must use guaranteed phytase level	FTU	8,660	OptiPhos PF (Huevepharma); Quantum Blue G (AB Vista)
provided by the phytase manufacturer.	FYT	15,100	Ronozyme Hi-Phos GT (DSM); Natuphos E 5,000 G (BASF)
Carrier			
Oil	%		Mineral or vegetable

- a) Guaranteed to stay free-flowing, lump free, and non-dusty.
- b) The final moisture level will be less than 10% and 98% product will flow through #20 U.S./Canadian screen.
- 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.

### Grow-Finish Base Mix Specification – Page 1 of 2 Last updated August, 2017

Name:			Pi	oduct name: <u>GF Base Mi</u>	x with lysine & phytase
Address:			Q	uantity, lb	Package size, lb
Phone:			U	se level, lb/ton Sow diets Nursery diets	
Fax:					: <u>45-50</u> s: <u>35-40</u>
Date:			Pı	rice desired (circle one)	\$/ton FOB
Date Needed:					\$/ton Delivered
Amino acids	Units	Guaranteed Potency per Lb of Base Mix		Sources	
Lysine	%	5.2	24	Lysine HCI	
Vitamins	Units	Guaranteed per Lb of		Sources	
Vitamin A	IU	96,0	000	Vitamin A acetate (retiny	l acetate)
Vitamin D	IU	1		Vitamin $D_3$ (cholecalciferol) with at least 50% supplied by a vitamin $A/D_3$ cross-linked beadlet	
Vitamin E (Pick one	IU	480		dl-α-tocophorol acetate	
source and provide source with quotation)	IU	240		d-α-tocophorol acetate (I	Natural vitamin E)
Vitamin K (menadione)	mg	48 I		MNB (Menadione nicotir	namide bisulfite)
Vitamin B <sub>12</sub>	mg	0.42		Cyanocobalamin	
Niacin	mg	900		Niacinamide, Nicotinic ad	cid
Pantothenic acid	mg	300		d-calcium pantothenate	
Riboflavin	mg	90		Crystalline riboflavin	
		Guaranteed Potency of Base Mix			
Minerals	Units	mg/lb	ppm	Sources	
Copper		300	660	Copper sulfate	
lodine		5.4	11.9	Ca iodate, Ethylenediam (EDDI)	ine dihydriodide
Iron		2,000	4,400	Ferrous sulfate	
Manganese		600	1,320	Manganese sulfate, man	ganese oxide
Selenium		5.4	11.9	Sodium selenite	
Zinc		2,000	4,400	Zinc sulfate, zinc oxide	
Calcium (Minimum) (Maximum)	% %	20.0		Calcium carbonate, mon or dicalcium phosphate	ocalcium phosphate,
Available phosphorus	%	4.8		Monocalcium phosphate phosphate	or dicalcium
NaCl (Minimum)	%	17.		,	
(Maximum)	%	20.0		Feed or food-grade salt	

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

	Units	Guaranteed Potency per Lb of Base Mix	Sources
Phytase (Pick one source and provide source with	FTU	8,160	Axtra TPT (Dupont)
quotation) – Must use guaranteed phytase level	FTU		OptiPhos PF (Huevepharma); Quantum Blue G (AB Vista)
provided by the phytase manufacturer.	FYT	13,600	Ronozyme Hi-Phos GT (DSM); Natuphos E 5,000 G (BASF)
Carrier			
Oil	%		Mineral or vegetable

- a) Guaranteed to stay free-flowing, lump free, and non-dusty.
- b) The final moisture level will be less than 10% and 98% product will flow through #20 U.S./Canadian screen.
- 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.

## Grow-Finish DDGS Base Mix Specification – Page 1 of 2 Last updated August, 2017

Name Address	Product name: GF DDGS Bas	e Mix
	Quantity, lb Pa	ackage size, lb
Phone Fax Email	Use level, lb/ton Sow diets: Nursery diets: Grower diets: Finisher diets:	
	Price desired (circle one)	\$/ton FOB
		\$/ton Delivere
	Guaranteed Potency	

Amino acids	Units		ed Potency Base Mix	Sources
Lysine	%	11.8		Lysine HCI
Vitamins	Units		ed Potency Base Mix	Sources
Vitamin A	IU	96,	000	Vitamin A acetate (retinyl acetate)
Vitamin D	IU	24,	000	Vitamin D <sub>3</sub> (cholecalciferol) with at least 50% supplied by a vitamin A/D <sub>3</sub> cross-linked beadlet
Vitamin E (Pick one source and provide	IU	48	30	dl-α-tocophorol acetate
source with quotation)	IU	24	40	d-α-tocophorol acetate (Natural vitamin E)
Vitamin K (menadione)	mg	4	.8	MNB (Menadione nicotinamide bisulfite)
Vitamin B <sub>12</sub>	mg	0.	42	Cyanocobalamin
Niacin	mg	9(	00	Niacinamide, Nicotinic acid
Pantothenic acid	mg	300		d-calcium pantothenate
Riboflavin	mg	9	0	Crystalline riboflavin
		Guaranteed Potency of Base Mix		
Minerals	Units	mg/lb	ppm	Sources
Copper		300	660	Copper sulfate
Iodine		5.4	11.9	Ca iodate, Ethylenediamine dihydriodide (EDDI)
Iron		2,000	4,400	Ferrous sulfate
Manganese		600	1,320	Manganese sulfate, manganese oxide
Selenium		5.4	11.9	Sodium selenite
Zinc		2,000	4,400	Zinc sulfate, zinc oxide
Calcium (Minimum) (Maximum)	% %		).0 3.0	Calcium carbonate, monocalcium phosphate, or dicalcium phosphate
Available phosphorus	%	0.2		Monocalcium phosphate or dicalcium phosphate
NaCl (Minimum) (Maximum)	% %		7.0	Feed or food-grade salt

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

	Units	Guaranteed Potency per Lb of Base Mix	
Phytase (Pick one source and provide source with quotation) – Must use guaranteed phytase level provided by the phytase manufacturer.	FTU or FYT	8,160	Axtra TPT (Dupont)
	FTU		OptiPhos PF (Huevepharma); Quantum Blue G (AB Vista)
	FYT	13,600	Ronozyme Hi-Phos GT (DSM); Natuphos E 5,000 G (BASF)
Carrier			
Oil	%		Mineral or vegetable

- f) Guaranteed to stay free-flowing, lump free, and non-dusty.
- g) The final moisture level will be less than 10% and 98% product will flow through #20 U.S./Canadian screen.
- h) 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.
- 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 an alternative source for any ingredient.