Starter Base Mix Specification – Page 1 of 2 Last updated December, 2021

Name: P			roduct name: <u>Starter Base Mix</u>			
Address:			Qı	uantity, lb	Package size, lb	
				se level, lb/ton Sow diets:		
Phone:		0.	Nursery diets:	65 lb		
Fax:		Grower diets: Finisher diets:				
Date:		-	Pr	rice desired (circle one)	\$/ton FOB	
Date Needed:					\$/ton Delivered	
Amino acids	Units	Guaranteed per Lb of E		Sources		
Lysine	%	7.2	5	Lysine HCI		
Methionine	%	5.2)	DL-Methionine		
Threonine	%	4.3	}	L-Threonine		
Vitamins	Units	Guaranteed per Lb of E	•	Sources		
Vitamin A	IU	57,690		Vitamin A acetate (retiny cross-linked beadlet	,	
Vitamin D	IU	/ / / / / / / / / / / / / / / / / / / /		Vitamin D ₃ (cholecalcifer supplied by a vitamin A/I	,	
Vitamin E (Pick one	IU	615		dl-α-tocophorol acetate		
source and provide source with quotation)	IU	307		d-α-tocophorol acetate (I	Natural vitamin E)	
Vitamin K (menadione)	mg	46		MNB (Menadione nicotin	namide bisulfite)	
Vitamin B ₁₂	mg	0.46		Cyanocobalamin		
Niacin	mg			Niacinamide, Nicotinic ad	cid	
Pantothenic acid	mg			d-calcium pantothenate		
Riboflavin	mg			Crystalline riboflavin		
		Guaranteed of Base				
Minerals	Units	mg/lb	ppm	Sources		
Copper		230	500	Copper sulfate		
lodine		4.10	9.1	Ca iodate, Ethylenediam (EDDI)	ine dihydriodide	
Iron		1,535	3,380	Ferrous sulfate		
Manganese		460	1,015	Manganese sulfate, man	ganese oxide	
Selenium		4.10	9.1	Sodium selenite		
Zinc		1,535	3,380	Zinc sulfate, zinc oxide		
Calcium (Minimum) (Maximum)	% %	15.8		Calcium carbonate, mon	ocalcium phosphate,	
,	%	17.0		or dicalcium phosphate	m nhoonhoto	
Available phosphorus	%	6.6		Monocalcium or dicalciur	п рпоѕрпате	
NaCl (Minimum) (Maximum)	%	10.0 11.5		Feed or food-grade salt		

Starter Base Mix Specification - Page 2 of 2

Other	Units	Guaranteed Potency per Lb of Base Mix	Sources
	FTU of	18,144	Axtra PHY GOLD (Dupont);
DI (/D' I		43,730	Empirical (ADM)
Phytase (Pick one source and provide source with		82,345	Grainzyme (Agrivida)
quotation) – Must use		26,983	Natuphos E 5,000 G (BASF)
guaranteed phytase level		33,031	OptiPhos Plus (Huevepharma)
provided by the phytase manufacturer.		22,331	Quantum Blue G (AB Vista)
		46,058	Ronozyme Hi-Phos GT (DSM)
		64,201	Smizyme Thermostable (Origination)
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 December, 2021

Name:				ſ	Product name: Sow Base Mix with phytase		
Addres	ss:			.	Quantity, lb	Package size, lb	
				`	Quantity, ib	i ackage size, ib	
Db	_			ı	Use level, lb/ton Sow o	liets: 75	
Pnone	<u> </u>		=		Nursery o	liets: liets:	
Fax:						diets:	
Date:_			_	i	Price desired (circle on	e) \$/ton FOB	
Date N	leeded:					\$/ton Delivered	
			Guaranteed				
Vitami	ns	Units	per Lb of E	Base Mix			
Vitamir	n A	IU	100,0	000	cross-linked beadlet		
	n D (Pick one	IU	20,0	00		ciferol) with at least 50% n A/D₃ cross-linked beadle	
	and provide with quotation)	mg	0.6		25-OH D3 (Hy-D)	1 A/D3 Closs-liliked beadle	
	n E (Pick one	IU	800		dl-α-tocophorol acet	ata	
source	and provide				· ·		
	with quotation)	IU	400			ate (Natural vitamin E)	
	n K (menadione)	mg	40		MNB (Menadione ni	cotinamide disuitite)	
Vitamir	1 B ₁₂	mg			Cyanocobalamin	t t.1	
Niacin		mg			Niacinamide, Nicotin		
	henic acid	mg			d-calcium pantothen		
Ribofla		mg	100		Crystalline riboflavin Choline chloride		
Choline	U	mg	6,66				
Biotin	-	mg	2.6		Spray dried biotin		
Folacir		mg	26		Folic acid		
Pyrido		mg	12		Pyridoxine HCI		
Carniti		mg	600		L-carnitine		
Chrom	ium	mg	2.4	.0	Chromium picolinate	,	
			Guaranteed of Base		У		
Minera	als	Units	mg/lb	ppm	Sources		
Coppe	r		200	440	Copper sulfate, Cop		
lodine			3.60	7.9	Ca iodate, Ethylened (EDDI)	diamine dihydriodide	
Iron			1,330	2,930	Ferrous sulfate		
Manga	nese		400	880	Manganese sulfate,	manganese oxide	
Seleniı	ım		3.60	7.9	Sodium selenite		
Zinc			1,330	2,930	Zinc sulfate, zinc oxi	de	
	m (Minimum)	%	19.			monocalcium phosphate,	
Jaiolai	(Maximum)	%	21.		or dicalcium phosph		
Availab	ole phosphorus	%	9.2		Monocalcium or dica		
NaCl	(Minimum)	%	13.	.3		· ·	
	(Maximum)	%	14.0		Feed or food-grade	salt	

Sow Base Mix Specification - Page 2 of 2

Other	Units	Guaranteed Potency per Lb of Base Mix	Sources
	FTU of FYT	9,435	Axtra PHY GOLD (Dupont);
		22,740	Empirical (ADM)
Phytase (Pick one source and provide source with		42,820	Grainzyme (Agrivida)
quotation) – Must use		14,031	Natuphos E 5,000 G (BASF)
guaranteed phytase level provided by the phytase manufacturer.		17,176	OptiPhos Plus (Huevepharma)
		11,612	Quantum Blue G (AB Vista)
		23,950	Ronozyme Hi-Phos GT (DSM)
		33,385	Smizyme Thermostable (Origination)
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) 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 reproduction. Replacement should be on an equal mg basis. Permission must be obtained before using other alternative sources for any ingredient.

Grow-Finish Base Mix Specification – Page 1 of 2 Last updated December, 2021

Name:	Product name: GF Base Mix with lysine				cwith lysine & phytase		
Address:			G	uantity, lb	Package size, lb		
			_	•	-		
Phone:			U	se level, lb/ton Sow diets: Nursery diets:			
		_		Grower diets:	45-50		
Fax:		Finisher diets: 35-40					
Date:		_	Р	rice desired (circle one)	\$/ton FOB		
Date Needed:					\$/ton Delivered		
Amino acids	Units	Guarantee per Lb of					
Lysine	%	5.2	24	Lysine HCI			
	•						
Vitamins	Units	Guarantee per Lb of		Sources			
				Vitamin A acetate (retiny	acetate) supplied by		
Vitamin A	IU	45,0	J00	cross-linked beadlet Vitamin D ₃ (cholecalcifered)	al) with at least 50%		
Vitamin D	IU			supplied by a vitamin A/D			
Vitamin E (Pick one	IU	480		dl-α-tocophorol acetate			
source and provide source with quotation)	IU	+		d-α-tocophorol acetate (N	Natural vitamin E)		
Vitamin K (menadione)	mg			MNB (Menadione nicotin	· · · · · · · · · · · · · · · · · · ·		
Vitamin B ₁₂	mg			Cyanocobalamin	,		
Niacin	mg			Niacinamide, Nicotinic ad	id		
Pantothenic acid	mg			d-calcium pantothenate			
Riboflavin	mg	90		Crystalline riboflavin			
	Г	1					
		Guarantee of Bas					
Minerals	Units	mg/lb	ppm	Sources			
Copper		300	660	Copper sulfate			
Iodine		5.4	11.9	Ca iodate, Ethylenediami (EDDI)	ne 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)	%	20.0		_Calcium carbonate, mon	ocalcium phosphate		
(Maximum)	%	21	.5	or dicalcium phosphate			
Available phosphorus	%	4.	8	Monocalcium or dicalciur	n phosphate		
NaCl (Minimum)	%	17	.0				
(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
	Ullits	•	
		14,152	Axtra PHY GOLD (Dupont);
Dhytaga (Diek and agunaa		34,110	Empirical (ADM)
Phytase (Pick one source and provide source with		64,229	Grainzyme (Agrivida)
quotation) – Must use	FTU or FYT	21,047	Natuphos E 5,000 G (BASF)
guaranteed phytase level provided by the phytase manufacturer.		25,764	OptiPhos Plus (Huevepharma)
		17,418	Quantum Blue G (AB Vista)
		35,925	Ronozyme Hi-Phos GT (DSM)
		50,077	Smizyme Thermostable (Origination)
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 December, 2021

Name Address	Product name: <u>GF DDGS Base Mix</u>				
	Quantity, lb	Package size, lb			
Phone	Use level, lb/ton Sow diets:_				
Fax	Nursery diets:				
Email	Grower diets:	40 to 45 lb			
	Finisher diets:				
	Price desired (circle one)	\$/ton FOB			
		\$/ton Delivered			

				\$/ton Delivered
Amino acids	Units		ed Potency Base Mix	Sources
Lysine	%	11.8		Lysine HCI
Vitamins	Units		ed Potency Base Mix	Sources
Vitamin A	IU	45,	000	Vitamin A acetate (retinyl acetate) supplied by cross-linked beadlet
Vitamin D	IU	18	000	Vitamin D ₃ (cholecalciferol) with at least 50% supplied by a vitamin A/D ₃ cross-linked beadlet
Vitamin E (Pick one source and provide	IU	ĺ	30	dl-α-tocophorol acetate
source with quotation)	IU	24	40	d-α-tocophorol acetate (Natural vitamin E)
Vitamin K (menadione)	mg	3	6	MNB (Menadione nicotinamide bisulfite)
Vitamin B ₁₂	mg	0.	36	Cyanocobalamin
Niacin	mg	540		Niacinamide, Nicotinic acid
Pantothenic acid	mg	300		d-calcium pantothenate
Riboflavin	mg		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)	%	20.0		Calcium carbonate, monocalcium phosphate, or dicalcium phosphate
Available phosphorus	%		.2	Monocalcium or dicalcium phosphate
NaCl (Minimum) (Maximum)	% %	17.0		Feed or food-grade salt

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

	Units	Guaranteed Potency per Lb of Base Mix	Sources
		14,152	Axtra PHY GOLD (Dupont);
Distance (Distance and a		34,110	Empirical (ADM)
Phytase (Pick one source and provide source with		64,229	Grainzyme (Agrivida)
quotation) – Must use	FTU or FYT	21,047	Natuphos E 5,000 G (BASF)
guaranteed phytase level		25,764	OptiPhos Plus (Huevepharma)
provided by the phytase manufacturer.		17,418	Quantum Blue G (AB Vista)
		35,925	Ronozyme Hi-Phos GT (DSM)
		50,077	Smizyme Thermostable (Origination)
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.
- i) 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.
- j) Permission must be obtained before using an alternative source for any ingredient.