Starter Base Mix Specification – Page 1 of 2 Last updated July, 2018

			p 44410 4 0 4.), = 0 · 0	
Name:			Pr	oduct name: Starter Base	e Mix_
Address:					
			Qı	uantity, lb	Package size, lb
			Us	se level, lb/ton Sow diets	<u>. </u>
Phone:				Nursery diets	: 65 lb
Fax:				Finisher diets	: S:
Date:			Pr	rice desired (circle one)	\$/ton FOB
Date Needed:					\$/ton Delivered
Amino acids	Units	Guaranteed per Lb of E		Sources	
Lysine	%	7.2		Lysine HCI	
Methionine	%	5.2		DL-Methionine	
Threonine	<u> </u>	4.3		L-Threonine	
1111 00111110	7,0	Guaranteed			
Vitamins	Units	per Lb of E	Base Mix	Sources	
Vitamin A	IU			Vitamin A acetate (retiny	,
Vitamin D	IU			Vitamin D ₃ (cholecalciferol) with at least 50% supplied by a vitamin A/D ₃ cross-linked beadlet	
Vitamin E (Pick one	IU	615 c		dl-α-tocophorol acetate	
source and provide source with quotation)	IU	307		d-α-tocophorol acetate (Natural vitamin E)
Vitamin K (menadione)	mg	46		MNB (Menadione nicotir	namide bisulfite)
Vitamin B ₁₂	mg	0.46		Cyanocobalamin	
Niacin	mg			Niacinamide, Nicotinic a	cid
Pantothenic acid	mg	380)	d-calcium pantothenate	
Riboflavin	mg	115		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	nganese oxide
Selenium		4.10	9.1	Sodium selenite	_
Zinc		1,535	3,380	Zinc sulfate, zinc oxide	
Calcium (Minimum)	%	15.8		Calcium carbonate, mon	ocalcium phosphate
(Maximum)	%	17.0	0	or dicalcium phosphate	
Available phosphorus	%	6.6	5	Monocalcium phosphate phosphate	or dicalcium
NaCl (Minimum)	%	10.0			
(Maximum)	%	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
Phytase (Pick one source and provide source with quotation) – Must use	FTU		OptiPhos PF (Huevepharma); Quantum Blue G (AB Vista)
guaranteed phytase level provided by the phytase manufacturer.	FTU or FYT	20,000	Axtra TPT (Dupont) 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 July, 2018

Name:			F	Product name: <u>Sow Base N</u>	Mix with phytase_
Address:			-	Quantity, lb	Package size, lb
			,	Quantity, 10	rackage size, ib
Division			l	Jse level, lb/ton Sow diets	:75
Phone:		•		Nursery diets Grower diets	: :
Fax:				Finisher diets	s:
Date:		-	F	Price desired (circle one)	\$/ton FOB
Date Needed:					\$/ton Delivered
		Guaranteed			
Vitamins	Units	per Lb of E			
Vitamin A	IU	100,0	000	Vitamin A acetate (retiny	,
Vitamin D	IU	20,6	00	Vitamin D ₃ (cholecalcifer supplied by a vitamin A/	
Vitamin E (Pick one source and provide	IU	80	0	dl-α-tocopho	orol acetate
source with quotation)	IU	400	0	d-α-tocophorol acetat	e (Natural vitamin E)
Vitamin K (menadione)	mg	40)	MNB (Menadione nicotir	namide bisulfite)
Vitamin B ₁₂	mg	0.4	.0	Cyanocobalamin	
Niacin	mg	60	0	Niacinamide, Nicotinic a	cid
Pantothenic acid	mg	333	3	d-calcium pantothenate	
Riboflavin	mg			Crystalline riboflavin	
Choline	mg	6,660		Choline chloride	
Biotin	mg	2.6	6	Biotin	
Folacin	mg	26	6	Folic acid	
Pyridoxine	mg	12	2	Pyridoxine HCI	
Carnitine	mg			L-carnitine	
Chromium	mg	2.40		Chromium picolinate	
	1	0	- Dotono		
		Guaranteed of Base		У	
Minerals	Units	mg/lb		Sources	
Copper		200	440	Copper sulfate, Copper	chloride
lodine		3.60	7.9	Ca iodate, Ethylenediam (EDDI)	nine dihydriodide
Iron		1,330	2,930	Ferrous sulfate	
Manganese		400	880	Manganese sulfate, mar	nganese oxide
Selenium		3.60	7.9	Sodium selenite	
Zinc		1,330	2,930	Zinc sulfate, zinc oxide	
Calcium (Minimum)	%	19.5		Calcium carbonate, mor	ocalcium phoenhata
(Maximum)	%	21.5		or dicalcium phosphate	iocaicium priospriate,
,				Monocalcium phosphate	or dicalcium
Available phosphorus	% %	9.2 13.		phosphate	
NaCl (Minimum) (Maximum)	%			Feed or food-grade salt	
(Maximan)	/0	14.0		i. 300 or 1000 grade sait	

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	8,660	OptiPhos PF (Huevepharma); Quantum Blue G (AB Vista)
quotation) – Must use guaranteed phytase level provided by the phytase manufacturer.	FYT		Axtra TPT (Dupont) 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 July, 2018

Name:	Product				duct name: GF Base Mix with lysine & phytase	
Address:			G	luantity, lb	Package size, lb	
			U	se level, lb/ton Sow diets:	-	
Phone:		_	Ü	Nursery diets:		
Fax:				Grower diets: Finisher diets:	45-50 35-40	
Date:		_	Р	rice desired (circle one)	\$/ton FOB	
Date Needed:					\$/ton Delivered	
Amino acids	Units	Guaranteed per Lb of I				
Lysine	%	5.2		Lysine HCI		
,						
Vitamins	Units	Guaranteed per Lb of I	•	Sources		
Vitamin A	IU	45,0	000	Vitamin A acetate (retinyl	acetate)	
Vitamin D	IU	18,0	000	Vitamin D ₃ (cholecalcifero supplied by a vitamin A/D	,	
Vitamin E (Pick one source and provide	IU			dl-α-tocophorol acetate		
source with quotation)	IU	240		d-α-tocophorol acetate (N	latural vitamin E)	
Vitamin K (menadione)	mg	36		MNB (Menadione nicotina	amide bisulfite)	
Vitamin B ₁₂	mg	0.36		Cyanocobalamin		
Niacin	mg	540		Niacinamide, Nicotinic aci	id	
Pantothenic acid	mg	300		d-calcium pantothenate		
Riboflavin	mg	90		Crystalline riboflavin		
		Guaranteed of Bas		,		
Minerals	Units	mg/lb	ppm	Sources		
Copper		300	660	Copper sulfate		
lodine		5.4	11.9	Ca iodate, Ethylenediamii (EDDI)	ne dihydriodide	
Iron		2,000	4,400	Ferrous sulfate		
Manganese		600	1,320	Manganese sulfate, mang	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, mono or dicalcium phosphate	calcium phosphate,	
Available phosphorus	%	4.8		Monocalcium phosphate of phosphate	or dicalcium	
NaCl (Minimum)	%	17.				
(Maximum)	%			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 quotation) – Must use	FTU		OptiPhos PF (Huevepharma); Quantum Blue G (AB Vista)
guaranteed phytase level provided by the phytase manufacturer.	FTU or FYT	13,600	Axtra TPT (Dupont) 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 July, 2018

Name Address	Product name: GF DDGS E	Base Mix
Addie55	Quantity, lb	Package size, lb
Phone	Use level, lb/ton Sow diets	<u>:</u>
Fax	Nursery diets	:
Email	Grower diets	: 40 to 45 lb
	Finisher diets	s: <u>35</u>
	Price desired (circle one)	\$/ton FOB
		\$/ton Delivered
	Guaranteed Potency	

Amino acids	Units	Guaranteed Potency per Lb of Base Mix		Sources
Lysine	%	11.8		Lysine HCI
Vitamins	Units	Guaranteed Potency per Lb of Base Mix		Sources
Vitamin A	IU	45,	000	Vitamin A acetate (retinyl acetate)
Vitamin D	IU			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	4	80	dl-α-tocophorol acetate
source with quotation)	IU	2	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	5-	40	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)	% %	17.0 20.0		Feed or food-grade salt

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

	Units	Guaranteed Potency per Lb of Base Mix	Sources
Phytase (Pick one source and provide source with quotation) – Must use	FTU		OptiPhos PF (Huevepharma); Quantum Blue G (AB Vista)
guaranteed phytase level provided by the phytase manufacturer.	FYT	13,600	Axtra TPT (Dupont) 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.
- 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.