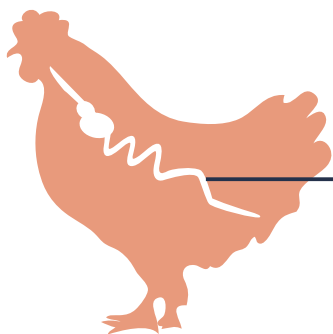




Effective enzyme solutions for a new generation of farming

20,000 Units/g Activity | Strain NTU-PHY-085 Thermostable Phytase

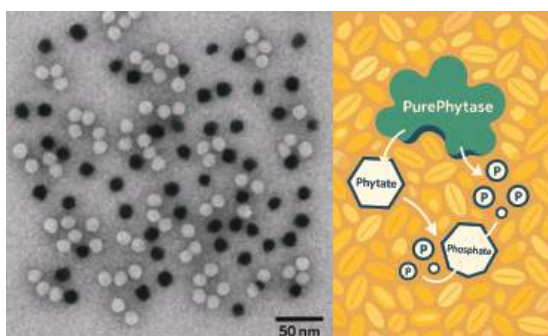


Unlock Maximum Phosphorus Utilization in Your Feed

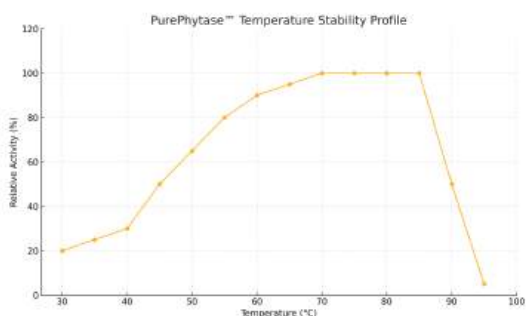
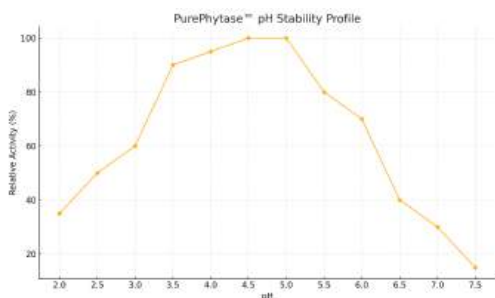
PurePhytase™ represents a breakthrough in feed enzyme technology, developed through collaborative research between New Hope Group China and National Taiwan University. This ultra-high-activity, thermostable phytase is exclusively licensed and manufactured by Range Pharma to liberate phytate-bound phosphorus and boost overall nutrient digestibility in poultry, swine diets.

PurePhytase™

Key Features for Your Operation



- Phytase enzyme molecules (lighter 10 nm spheres)
- Bound phosphate ions (electron-dense dark spots)



Why PurePhytase™ Outperforms

Key Features

Ultra-high activity:

20,000U/g specific activity—2.5× improvement over parental strains

Exceptional thermostability:

>95% activity retained after 3min at 85°C

Broad pH tolerance:

>90% activity across pH3.0–6.5 (retains >70% at pH2.5 and pH7.0)

Pelleting resilience:

≈95% activity recovery after standard feed-conditioning (82°C, 45s, 16% moisture)

Precision nutrition:

Established matrix values for P, Ca, ME, Cys/Thr release

Differentiators

Balance of activity & stability:

Industry-leading combination of high U/g and heat resistance

Lower inclusion rates:

60g/MT delivers performance equivalent to 100–200g/MT of conventional products

Multi-species validation:

Proven efficacy in broilers, layers & grower pigs

Robust manufacturing:

Aspergillus niger system optimized for consistency (CV<5%) and purity (≈85% enzyme protein)

Product Details

Formulation: Spray-dried granules with sorbitol, NaCl & potassium sorbate protectants

Specific activity: 20,150±850U/g; molecular weight ≈68kDa



Usage and administration

Indicative dosage and application		Dosage
Broiler	Broiler starter	50 - 100g per tonne feed (<i>optimal 60g per tonne feed</i>)
	Broiler grower/finisher	50 - 100g per tonne feed (<i>optimal 60g per tonne feed</i>)
Pullet - Layer/breeder	Pullet (1 - 14 weeks)	50 - 100g per tonne feed (<i>optimal 60g per tonne feed</i>)
	Pullet (>14 weeks)	50 - 100g per tonne feed (<i>optimal 60g per tonne feed</i>)
Swine	Sow	50 - 100g per tonne feed (<i>optimal 60g per tonne feed</i>)
	Weaner	50 - 100g per tonne feed (<i>optimal 60g per tonne feed</i>)
	Grower/Finisher	50 - 100g per tonne feed (<i>optimal 60g per tonne feed</i>)

Field Trial Results

Metric	Broiler Chickens (42 d; 960 birds)	Laying Hens (16 wk; 480 hens)	Grower Pigs (35 d; 144 pigs)
Phosphorus Util.	+59.6 % digestibility	-39.3 % P excretion	+54.6 % digestibility
Performance	Final BW: 2018 > 2289g(+13.5 %) FCR: 1.78 > 1.58(-11.2 %)	Egg prod.: 89.2 > 94.2 %(+5.0 %) Egg wt: stable	Final BW: 56.2 > 63.1 kg(+12.3 %) FCR: 2.24 > 2.01(-10.3 %)
Bone Integrity	Tibial ash: 38.2 > 45.1 %(+18.1 %) Strength: 142 > 191 N(+34.5 %)	Shell thickness: 0.342 > 0.376 mm(+9.9 %) Strength: 32.1 > 37.4 N(+16.5 %)	Bone ash: 41.3 > 48.9 %(+18.4 %) Strength: 156 > 213 N(+36.5 %)
Inclusion Rate	50g / MT	50g / MT	50g / MT





Matrix Values

Broiler Matrix

Nutrients	Contributions	Matrix
d. Phosphorus	0.1600	3200
d. Calcium	0.1200	2400
Crude Protein	0.4480	8960
d. Lysine	0.0180	360
d. Methionine	0.0090	180
d. Methionine + Cystein	0.0160	320
d. Threonine	0.0150	300
d. Tryptophan	0.0040	80
d. Isoleucine	0.0130	260
d. Arginine	0.0210	420
d. Valine	0.0090	180
PurePhytase HT 13,333FTU/g recommended energy (kcal/kg)	53	1060000
Dosage, g/MT		50



Matrix Values

Layer Matrix

Nutrients	Contributions	Matrix
d. Phosphorus	0.1500	3000
d. Calcium	0.1200	2400
Crude Protein	0.3440	6880
d. Lysine	0.0140	280
d. Methionine	0.0060	120
d. Methionine + Cystein	0.0070	140
d. Threonine	0.0120	240
d. Tryptophan	0.0020	40
d. Isoleucine	0.0080	160
d. Arginine	0.0110	220
d. Valine	0.0110	220
PurePhytase HT 13,333FTU/g recommended energy (kcal/kg)	47	940000
Dosage, g/MT		50



Matrix Values

Swine Matrix

Nutrients	Contributions	Matrix
d. Phosphorus	0.1500	3000
d. Calcium	0.1100	2200
Crude Protein	0.4900	9800
d. Lysine	0.0280	560
d. Methionine	0.0090	180
d. Methionine + Cystein	0.0340	680
d. Threonine	0.0190	380
d. Tryptophan	0.0050	100
d. Isoleucine	0.0160	320
d. Arginine	0.0220	440
d. Valine	0.0130	260
PurePhytase HT 13,333FTU/g recommended energy (kcal/kg)	47	940000
Dosage, g/MT		50