



2016 PRODUCT MANUAL

Loose Lick, Concentrates & Complete Feeds





Company Profile

Since 2007, PBA Feeds has established itself as a premium supplier of a wide range of stockfeed supplements, grain and loose licks.

The professional team at PBA Feeds are confident they have a product that will suit your needs, whether you are a cattle or sheep producer, feedlotter or dairy farmer. Feed for all your equine needs are covered also under the Hyfeed brand under which PBA Feeds manufactures its horse feed products.

Located in Industrial Avenue, Toowoomba, PBA Feeds operate under an Australian quality assurance program and are Feedsafe accredited, with all of their products manufactured under the highest industry standard. The mill is also certified by Australian Certified Organics (ACO) to manufacture organic non-GMO full fat soybean meal and expeller soybean meal onsite.

In addition to this, PBA Feeds trade in bulk and bagged protein meals such as cottonseed meal, palm kernel meal and canola meal. PBA Feeds is also a supplier of Australian non-GMO full fat soybean meal, expeller soybean meal, soybean oil, expeller canola meal and canola oil, which are all manufactured on-site.

With a dedicated team of qualified staff and feed specialists, PBA Feeds can answer your enquiries on our Loose Lick supplements, concentrates, mineral mixes and protein meals for home mixing and can custom mix to your requirements.

In our group of companies, we also have **PB Agrifood**, specialist grain traders and planting seed suppliers, and **Maralong Milling**, a specialist miller of alternative and gluten free flours.



Livestock Supplementation with Loose Licks

- ✓ Loose licks are the most **cost-efficient** method of supplementation for livestock grazing in a paddock on natural or improved pasture, forage crops or stubble.
- ✓ They may contain some rumen degradable **protein** (eg. urea) and some protein meals that are high in by-pass protein, such as copra and cotton seed meal.
- ✓ Loose licks may also contain **macro minerals** such as calcium, phosphorous, magnesium, sulphur and salt, as well as micro-elements like copper, zinc, selenium, cobalt, manganese, iodine, plus vitamins A, D and E.
- ✓ Loose licks are manufactured with varying amounts of these elements to suit a wide range of stock grazing on different types of country to **balance deficiencies** in paddock feed within varying seasonal conditions.
- ✓ Successful feeding of loose licks can **increase the digestion and performance** of stock grazing low protein and high fibre diets.
- ✓ Available in **easy-to-handle** 25kg bags.



When to Supplement?

- ✓ Dry feed supplementation is commenced when the producer decides that livestock are not to lose any more weight.
- ✓ Supplementation may begin when dietary protein in available grass falls to below 6%. The nutritional value of paddock grasses decreases as plants mature.
- ✓ One of the main points in using loose licks is to begin supplementing before livestock start to slip in condition.

GENERAL WARNINGS WHEN USING LOOSE LICK

- **Urea can kill stock if consumed too quickly.** Stock must be introduced to supplements with lower urea levels initially allowing the rumen to build up an ability to utilise ammonia.
- **Never introduce supplements to hungry or starving stock** as they will most probably gorge on supplement, thus consuming urea levels that may prove toxic.
- **Keep dry at all times.** Troughs for feeding loose mix should be well drained and preferably have a roof to prevent water pooling in the loose mix.
- **Monitor consumption.** Always keep track of the animals' intake of loose lick so as to manage their supplement intake and thus their urea intake. The most effective urea level intake per head/day is between 40-80g for cattle and 4-8g for sheep.
- **Feed to the intended species.** Some loose licks contain ingredients such as Monensin (Rumensin®) that can kill horses and dogs if consumed.
- **Never let troughs go empty,** especially later in the season.
- **Do not feed loose licks in conjunction with other supplements** as toxicity may occur.
- **Clean water needs to be available at all times but don't place loose lick close to water.**
- **Loose licks are designed to be fed in conjunction with abundant pasture** or alternate roughage sources.

WHEN TO SUPPLEMENT

During the winter/dry season the protein content of most pastures falls below the percentage required to support animal production. The low protein levels reduce the intake of pasture, consequently resulting in a deficiency in energy. This energy deficiency can be overcome by feeding a protein supplement such as a loose lick to stock.

For these supplements to be effective there must be an adequate supply of dry feed available. Loose lick supplements should ideally be introduced before conditions become dry and cattle start to lose weight.

Loose mix supplements can be manufactured with urea levels of 0%, 4%, 8%, 12%, 16% & 20%. Urea increases microbial activity in the rumen, allowing stock to chase roughage. It allows better digestion of roughage therefore, increasing dry matter intake.

In the rumen, urea is broken down into ammonia and carbon dioxide. The ammonia is used by micro-organisms to form microbial protein. Ammonia increases the rate of microbial activity, and the rate that they break down feed will increase the intake of feed due to faster digestion. The efficient use of urea can increase dry matter intake by up to 25-30%.

PRACTICAL FEEDING OF LOOSE LICK

Slowing Consumption

- If the stock that you are feeding are non-lactating cows, steers or bullocks then you can adjust intake by adding one bag of loose lick to one bag of salt and then slowly decrease salt content as the consumption rates fall below recommended daily intakes. The addition of salt will add extra bitterness to the product.
- If you are feeding lactating cattle or weaners, then to slow consumption you would add DCP (dicalcium phosphate). At an initial mixing rate of one bag of loose lick to equal weight of DCP and then slowly decrease DCP as the consumption slows.
- Beware of cattle that are salt hungry or phosphorus deficient as these may make stock increase their consumption in the short term.

Increasing Consumption

- If the loose lick intakes are not up to recommended daily intake, it is advised that you introduce into the top of the loose lick supplement a palatable protein meal such as Copra or Cotton Seed Meal. It should be introduced to entice cattle to consume correct daily intakes. The protein meal would need to be incorporated in to the top 6 inches (15cm) of loose lick, so that the stock gains a taste for the supplement.

RECORDS TO KEEP

- The number of livestock in the paddock
- The amount of loose lick put into troughs
- The number of days taken to consume the loose lick

CALCULATIONS TO MAKE

- $\text{Daily Intake} = \text{kg of lick} / \text{Number of days} / \text{Number of Head} \times 1000$
- $\text{Cost Per Head} = \text{Cost of lick} / 1000 / 1000 \times \text{Daily Intake}$

For further information on feeding loose licks, contact one of the below staff for further information:

Phil Best – 0439 779 100

Steve Mantova – 0438 380 760

Shannon Godwin – 0447 771 552

Will Bazley – 0408 133 173

Ben Hardy – 0475 970 629



FEEDER RANGE

**Call PBA Feeds on 07 4633 2266
to order your Mineral Feeders today!**



**Don't risk
urea poisoning!**

Our Mineral Feeder gives
your feed weatherproof
protection and is
accessible to stock
around the clock!

Mineral Feeders

- ✓ Feeder available in 120L & 250L capacity
- ✓ Weather-proof
- ✓ Flexible rubber roof which cattle lift up to access feed
- ✓ Peg down points to prevent livestock pushing trough around
- ✓ Durable and rust-free
- ✓ Cost effective



Covered Mineral Feeder

- ✓ 500L capacity feeder
- ✓ Durable roof with overhang to protect feed from the elements
- ✓ Raised tub for extra feed protection
- ✓ Swivel lid for easy refilling
- ✓ Lid can be assembled to open to the left or to the right
- ✓ Lid can be latched securely in the closed position to prevent stock opening it



NO LIFT!

**Innovative new swivel lid
for easy filling.**

Designed to minimise risk of back
strain or injury when refilling tub.

Hylick Grower is a range of loose licks formulated for grazing cattle that:

- ✓ greatly assists in maintaining body weight and correcting vitamin and mineral deficiency in stock
- ✓ contains Rumensin® to improve feed efficiency
- ✓ contains bypass proteins & urea that encourages grazing & better utilisation of dry feed

Directions of Use: Feed in a well drained trough which is protected from the weather

Average Consumption Rate: 100 – 500 grams / head / day

TYPICAL ANALYSIS PER KG

Product	0%	4%	8%	12%	16%	20%
Total Protein (Min)	12	21	33	45	58	70 %
Crude Protein (Min)	12	9.5	10	9	12	6 %
Equivalent Crude Protein (Min)	0	11.5	25	36	47	63 %
Urea (Max)	0	4	8	12	16	20 %
Crude Fat (Min)	3	3	3	3	2	3 %
Crude Fibre (Max)	4	4	4	3	2	1 %
Salt (Max)	1	20	20	20	20	20 %
Calcium (Min)	100	110	110	120	110	90 g/kg
Magnesium (Min)	13	8	7	2	2	2 g/kg
Phosphorous (Min)	20	20	20	20	20	20 g/kg
Sulphur (Min)	6	6	15	20	25	25 g/kg
Cobalt (Min)	10	10	10	10	10	10 mg/kg
Copper (Min)	202	202	202	202	202	202 mg/kg
Iodine (Min)	5	5	5	5	5	5 mg/kg
Iron (Min)	53	53	42	33	47	25 mg/kg
Manganese (Min)	220	220	220	220	220	216 mg/kg
Selenium (Min)	5	5	5	5	5	5 mg/kg
Zinc (Min)	811	811	811	811	811	811 mg/kg
Vitamin A (Min)	52 000	52 000	52 000	52 000	52 000	52 000 IU/kg
Vitamin D (Min)	4 000	4 000	4 000	4 000	4 000	4 000 IU/kg
Vitamin E (Min)	120	120	120	120	120	120 mg/kg
Mj/kg	3	3	3	3	3	3 Mj/kg
Active Constituent (Monensin per kg)	300	300	300	300	300	300 mg

Please note: Livestock should be introduced to dry licks on urea levels under 10% so as to accustom the rumen to urea before feeding licks at higher urea levels such as 16% and 20%. Analysis & materials used are subject to availability of ingredients due to seasonal variations.





HYLICK WEANER RANGE

Hylick Weaner is a great loose lick for starting weaners on supplement through to older weaners:

- ✓ contains a percentage of grain to encourage the smaller calves to consume the mix
- ✓ contains bypass proteins & urea that encourages grazing & better utilisation of dry feed
- ✓ good product for backward calves to help improve their growth rates and condition
- ✓ will greatly assist in maintaining body weight and correcting vitamin and mineral deficiency in weaners
- ✓ contains Rumensin® to improve feed efficiency

Directions of Use: Feed in a well drained trough which is protected from the weather

Average Consumption Rate: 200 – 500 grams / head / day

TYPICAL ANALYSIS PER KG

Product	Weaner 0 %		Weaner 4%		Weaner 8%	
Total Protein (Min)	12	%	28	%	34	%
Crude Protein (Min)	12	%	16.5	%	11	%
Equivalent Crude Protein (Min)	0	%	11.5	%	23	%
Urea (Max)	0	%	4	%	8	%
Crude Fat (Min)	4	%	4	%	3	%
Crude Fibre (Max)	5	%	4	%	4	%
Salt (Max)	15	%	10	%	12.5	%
Calcium (Min)	110	g/kg	100	g/kg	120	g/kg
Magnesium (Min)	16	g/kg	8	g/kg	6	g/kg
Phosphorous (Min)	10	g/kg	15	g/kg	15	g/kg
Sulphur (Min)	6	g/kg	6	g/kg	10	g/kg
Cobalt (Min)	10	mg/kg	10	mg/kg	10	mg/kg
Copper (Min)	204	mg/kg	204	mg/kg	204	mg/kg
Iodine (Min)	5	mg/kg	5	mg/kg	5	mg/kg
Iron (Min)	70	mg/kg	102	mg/kg	56	mg/kg
Manganese (Min)	231	mg/kg	231	mg/kg	231	mg/kg
Selenium (Min)	5	mg/kg	5	mg/kg	5	mg/kg
Zinc (Min)	817	mg/kg	826	mg/kg	814	mg/kg
Vitamin A (Min)	52 000	IU/kg	52 000	IU/kg	52 000	IU/kg
Vitamin D (Min)	4 000	IU/kg	4 000	IU/kg	4 000	IU/kg
Vitamin E (Min)	120	mg/kg	120	mg/kg	120	mg/kg
Mj/kg	6.7	mj/kg	6.3	mj/kg	6.3	Mj/kg
Active Constituent (Monensin per kg)	300	mg	300	mg	300	mg

Please note: Before starting on 8% lick, cattle should spend time on Hylick Weaner 4%. Analysis & materials used are subject to availability of ingredients due to seasonal variations.



Hylick Breeder is a loose lick especially formulated for supplementing cows & heifers to greatly assist in improving:

- ✓ overall herd health
- ✓ conception rates
- ✓ phosphorous and trace mineral deficiency
- ✓ best used 8 weeks before and through joining
- ✓ contains Rumensin® to improve feed efficiency
- ✓ contains bypass proteins & urea that encourages grazing & better utilisation of feed
- ✓ contains Alltech Bioplex High Five®, a highly available form of organic trace elements that are better absorbed & utilised, leading to significant improvements in health & performance when compared with inorganic minerals

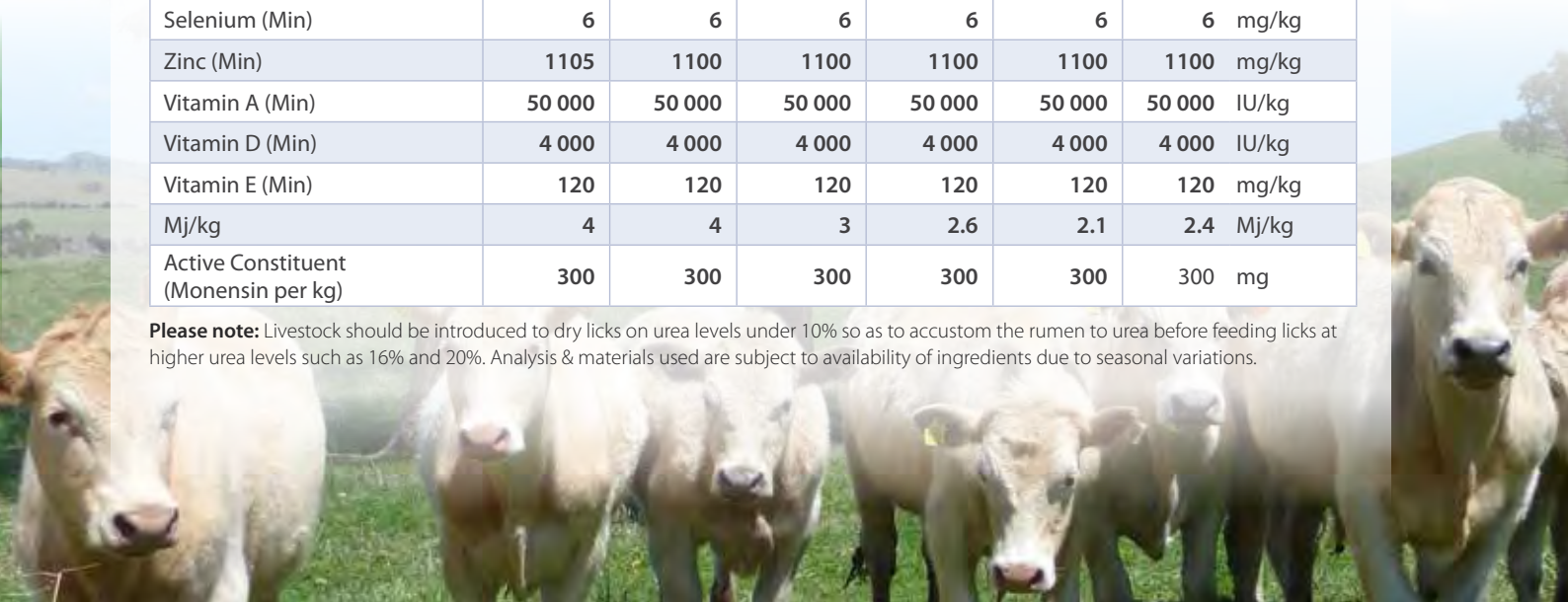
Directions of Use: Feed in a well drained trough which is protected from the weather

Average Consumption Rate: 100 – 500 grams / head / day

TYPICAL ANALYSIS PER KG

Product	0%	4%	8%	12%	16%	20%	
Total Protein (Min)	9	25	35	46	56	70	%
Crude Protein (Min)	9	13.5	12	10	6	6	%
Equivalent Crude Protein (Min)	0	11.5	23	36	50	64	%
Urea (Max)	0	4	8	12	16	20	%
Crude Fat (Min)	4	4	3	2.5	2	2.5	%
Crude Fibre (Max)	4	4	4	3	1	1	%
Salt (Max)	10	10	20	20	20	20	%
Calcium (Min)	110	120	110	110	100	100	g/kg
Magnesium (Min)	15	8	6	1	1	1	g/kg
Phosphorous (Min)	40	40	40	40	40	40	g/kg
Sulphur (Min)	11	11	16	20	20	25	g/kg
Cobalt (Min)	15	15	15	15	15	15	mg/kg
Copper (Min)	291	291	291	291	291	291	mg/kg
Iodine (Min)	5	5	5	5	5	5	mg/kg
Iron (Min)	60	48	44	38	38	38	mg/kg
Manganese (Min)	269	262	260	257	258	252	mg/kg
Selenium (Min)	6	6	6	6	6	6	mg/kg
Zinc (Min)	1105	1100	1100	1100	1100	1100	mg/kg
Vitamin A (Min)	50 000	50 000	50 000	50 000	50 000	50 000	IU/kg
Vitamin D (Min)	4 000	4 000	4 000	4 000	4 000	4 000	IU/kg
Vitamin E (Min)	120	120	120	120	120	120	mg/kg
Mj/kg	4	4	3	2.6	2.1	2.4	Mj/kg
Active Constituent (Monensin per kg)	300	300	300	300	300	300	mg

Please note: Livestock should be introduced to dry licks on urea levels under 10% so as to accustom the rumen to urea before feeding licks at higher urea levels such as 16% and 20%. Analysis & materials used are subject to availability of ingredients due to seasonal variations.



ORGANIC TRACE MINERALS

Zinc, Copper, Manganese, Cobalt (and Selenium)



Bioplex® Organic Trace Minerals are chelated to a range of peptides and amino acids enabling them to be absorbed more effectively through the gut wall for better utilisation by bulls, cows, calves and growing cattle.

Bioplex® trace minerals play an important role in structural protein formation, mastitis and lameness prevention, muscle protection and enzyme formation.

Benefits of Bioplex® minerals into drylicks:

- ✓ Provide for optimal animal health
- ✓ Provide for optimal animal performance
- ✓ Maintain reproductive efficiency
- ✓ Improve immunity
- ✓ Trace minerals are needed for tissue repair following parturition and hormone biosynthesis
- ✓ Fewer days to first service and Higher % conception to first service
- ✓ More embryos per flush, higher grade embryos
- ✓ Improve milk quality in breeding cows
- ✓ Improve semen quality in Bulls



Hylick Mulga is a loose lick suited to supplementing cattle that are grazing Mulga in their diet. It will assist in:

- ✓ increasing consumption & aids in digestion of Mulga
- ✓ increasing dry matter intakes by up to 20%
- ✓ maintaining body weight and correcting vitamin & mineral deficiency in stock
- ✓ contains Rumensin® to improve feed efficiency
- ✓ contains bypass proteins & urea that encourages grazing & better utilisation of feed
- ✓ Hylick Mulga Mix 8% and 16% contains Polyethelene Glycol (PEG) to assist in breaking down condensed tannins present in mulga

Directions of Use: Feed in a well drained trough which is protected from the weather

Average Consumption Rate: 200 – 500 grams / head / day

TYPICAL ANALYSIS PER KG

Product	Economix 8%	Economix 16%	Mulga Mix 8%	Mulga Mix 16%
Total Protein (Min)	30	55	34	56 %
Crude Protein (Min)	7	6	8	10 %
Equivalent Crude Protein (Min)	23	49	26	46 %
Urea (Max)	8	16	8	16 %
Crude Fat (Min)	3	5	2	3 %
Crude Fibre (Max)	4	3	4	3 %
Salt (Max)	20	20	20	20 %
Calcium (Min)	120	100	90	90 g/kg
Magnesium (Min)	2	3	5	2.5 g/kg
Phosphorous (Min)	10	10	20	20 g/kg
Sulphur (Min)	10	30	25	25 g/kg
Cobalt (Min)	8	8	12	12 mg/kg
Copper (Min)	131	161	202	202 mg/kg
Iodine (Min)	4	4	5	5 mg/kg
Iron (Min)	26	26	38	37 mg/kg
Manganese (Min)	177	180	219	215 mg/kg
Selenium (Min)	4	4	5	5 mg/kg
Zinc (Min)	810	646	808	808 mg/kg
Vitamin A (Min)	41 000	41 000	52 000	52 000 IU/kg
Vitamin D (Min)	3 200	3 200	4 000	4 000 IU/kg
Vitamin E (Min)	96	96	120	120 mg/kg
Mj/kg	4	4	4	4 Mj/kg
Active Constituent (Monensin per kg)	300	300	300	300 mg

Please note: Analysis & materials used are subject to availability of ingredients due to seasonal variations.



HYLICK NEW ENGLAND RANGE

Hylick New England is a range of loose licks formulated for grazing cattle that:

- ✓ greatly assists in maintaining body weight and correcting vitamin and mineral deficiency in stock
- ✓ contains Rumensin® to improve feed efficiency
- ✓ contains bypass proteins & urea that encourages grazing & better utilisation of dry feed

Directions of Use: Feed in a well drained trough which is protected from the weather

Average Consumption Rate: 200 – 500 grams / head / day

TYPICAL ANALYSIS PER KG

Product	0%	4%	8%	12%	16%	20%
Total Protein (Min)	10	25	34	50	61	71 %
Crude Protein (Min)	10	13.5	11	17	11	14 %
Equivalent Crude Protein (Min)	0	11.5	23	37	50	57 %
Urea (Max)	0	4	8	12	16	20 %
Crude Fat (Min)	5	4	4	5	3	2 %
Crude Fibre (Max)	6	6	6	3	5	2 %
Salt (Max)	15	15	20	20	20	20 %
Calcium (Min)	100	110	110	100	90	80 g/kg
Magnesium (Min)	3	2	2	1	1	2 g/kg
Phosphorous (Min)	10	10	10	10	10	10 g/kg
Sulphur (Min)	6	6	10	20	20	25 g/kg
Cobalt (Min)	6	6	6	6	6	6 mg/kg
Copper (Min)	122	122	122	122	122	122 mg/kg
Iodine (Min)	4	4	4	4	4	3 mg/kg
Iron (Min)	50	61	44	43	36	66 mg/kg
Manganese (Min)	144	144	144	144	138	142 mg/kg
Selenium (Min)	3	3	3	3	3	3 mg/kg
Zinc (Min)	495	495	495	495	488	494 mg/kg
Vitamin A (Min)	31 000	31 000	31 000	31 000	31 000	31 000 IU/kg
Vitamin D (Min)	2 400	2 400	2 400	2 400	2 400	2 400 IU/kg
Vitamin E (Min)	72	72	72	72	72	72 mg/kg
Mj/kg	5.25	4.7	4.3	4	2	2 Mj/kg
Active Constituent (monensin per kg)	300	300	300	300	300	300 mg

Please note: Livestock should be introduced to dry licks on urea levels under 10% so as to accustom the rumen to urea before feeding licks at higher urea levels such as 16% and 20%. Analysis & materials used are subject to availability of ingredients due to seasonal variations.



Merriwa beef producers, Tony and Heidi Inder, “Rockwell”, have experienced a good season, however during both the good and bad times, they always turn to PBA Feeds’ products.

Supplying into the supermarket trade, the Inder’s run 100 Angus cows on their 526 hectare property, and fatten up to 1000 head of trade cattle annually. Mr Inder said they mixed their own grain ration, including barley, oats, lupins mixed with **PBA Feedlot Macro**, as a supplement feed in the paddock.

“We are very happy with PBA’s products, as it gives us protection, as we feed a high level of grain. It gets them started and keeps them healthy,” he said. “Our last lot of home grown calves were weaned at 352kg at 9-10 months of age, then fattened on crop and a PBA Feeds grain mix for 120 days. We turned them off at 480kg into the supermarket trade. Our growth rate up until weaning was very good also.”

Mr Inder said he used PBA’s loose lick products during a dry feed situation also, with great results. “Our cows have access to the **New England 8%** all year round.”

In the lush times, he uses **Bloatliq**, which provides him excellent bloat control on Lucerne and clover pastures. “It has been a big success for us,” Mr Inder said.

The Inder family operate their on-farm business, Rockwell Livestock and Property, and are agents for PBA Feeds. “We receive very good feedback from clients using the PBA products,” he said. “I’ve found with clients’ cattle that they’ve had improved growth rates and improved health including their eyes, as they haven’t had much blight etc,” Mr Inder said. “The PBA products have improved their overall herd health and growth rates, resulting in quicker turn-off of livestock.”

“The PBA products have improved their overall herd health and growth rates, resulting in quicker turn-off of livestock.”





Hylick Green Forage is formulated specifically to supplement cattle grazing on forage sorghum & lush green pastures.

- ✓ can be used for most types of winter & summer grasses & pastures
- ✓ high sulphur lick helps combat prussic acid in forage sorghum & sorghum stubble
- ✓ helps prevent nitrate toxicity issues in both pasture & forage
- ✓ contains bypass proteins that encourages grazing & better utilisation of feed
- ✓ maximises weight gain on green feed & forage
- ✓ minimises scouring
- ✓ contains Rumensin® to improve feed efficiency

Directions of Use: Feed in a well drained trough which is protected from the weather

Average Consumption Rate: 200 – 500 grams / head / day

TYPICAL ANALYSIS PER KG

Total Protein (Min)	8 %	Cobalt (Min)	10 mg/kg
Crude Protein (Min)	8 %	Copper (Min)	161 mg/kg
Equivalent Crude Protein (Min)	0 %	Iodine (Min)	5 mg/kg
Urea (Max)	0 %	Iron (Min)	39 mg/kg
Crude Fat (Min)	3 %	Manganese (Min)	215 mg/kg
Crude Fibre (Max)	4 %	Selenium (Min)	5 mg/kg
Salt (Max)	10 %	Zinc (Min)	1 013 mg/kg
Calcium (Min)	70 g/kg	Vitamin A (Min)	52 000 IU/kg
Magnesium (Min)	30 g/kg	Vitamin D (Min)	4 000 IU/kg
Phosphorous (Min)	15 g/kg	Vitamin E (Min)	120 mg/kg
Sulphur (Min)	60 g/kg	Mj/kg	6.5 Mj/kg
Active Constituent	300 mg/kg Monensin		

Please note: Analysis & materials used are subject to availability of ingredients due to seasonal variations..





Hylick Green Feed 80 is designed to be fed to cattle grazing lush green feed such as Ryegrass or Oats in order to better utilise available protein.

- ✓ assists in preventing metabolic disorders such as grass tetany by balancing minerals, in particular calcium and magnesium, which are tied up from high soluble protein, high potassium and high lipids in green feed
- ✓ assists in maintaining a correct sulphur-nitrogen ratio to enable livestock to improve their performance on green pasture
- ✓ Greatly assists the digestive system to utilise green feed and to help reduce scouring
- ✓ Contains a condensed energy source to help balance the energy to protein ration in the diet

Directions of Use: Feed in a well drained trough which is protected from the weather

Average Consumption Rate: 80-100 grams / head / day

TYPICAL ANALYSIS PER KG

Total Protein (Min)	2 %	Cobalt (Min)	40 mg/kg
Crude Protein (Min)	2 %	Copper (Min)	800 mg/kg
Equivalent Crude Protein (Min)	0 %	Iodine (Min)	20 mg/kg
Urea (Max)	0 %	Iron (Min)	9 mg/kg
Crude Fat (Min)	0.7 %	Manganese (Min)	812 mg/kg
Crude Fibre (Max)	2 %	Selenium (Min)	20 mg/kg
Salt (Max)	20 %	Zinc (Min)	3 200 mg/kg
Calcium (Min)	100 g/kg	Vitamin A (Min)	208 000 IU/kg
Magnesium (Min)	570 g/kg	Vitamin D (Min)	16 000 IU/kg
Phosphorous (Min)	23 g/kg	Vitamin E (Min)	480 mg/kg
Sulphur (Min)	50 g/kg	Non-Structural Carbohydrate	14 %
Active Constituent	500 mg/kg Monensin		



NEW ENGLAND HI MAG

New England Hi Mag is a loose mix supplement to be fed to cattle grazing lush green feed such as ryegrass, oats and other improved pastures.

- ✓ assists in preventing metabolic disorders such as grass tetany by balancing minerals, in particular calcium and magnesium, which are tied up from high soluble protein, high potassium and high lipids in green feed

Directions of Use: Feed in a well drained trough that is protected from weather

Average Consumption Rate: 200-500 grams / head / day

Typical Analysis per kg

Total Protein (Min)	5 %	Cobalt (Min)	8 mg/kg
Crude Protein (Min)	5 %	Copper (Min)	161 mg/kg
Equivalent Crude Protein (Min)	0 %	Iodine (Min)	4 mg/kg
Urea (Max)	0 %	Iron (Min)	18 mg/kg
Crude Fat (Min)	4 %	Manganese (Min)	182 mg/kg
Crude Fibre (Max)	6 %	Selenium (Min)	4 mg/kg
Salt (Max)	15 %	Zinc (Min)	648 mg/kg
Calcium (Min)	120 g/kg	Vitamin A (Min)	41 000 IU/kg
Magnesium (Min)	60 g/kg	Vitamin D (Min)	3 200 IU/kg
Phosphorous (Min)	0.6 g/kg	Vitamin E (Min)	96 mg/kg
Sulphur (Min)	20 g/kg	Non-Structural Carbohydrate	13.8 %
Active Constituent	200 mg/kg Monensin		

Please note: Analysis & materials used are subject to availability of ingredients due to seasonal variations.

HYLICK WP CATTLE MINERALS

Hylick WP Cattle Minerals is a loose lick with a balanced level of macro and micro minerals to maximise performance of cattle on improved pastures.

- ✓ may assist in the prevention of grass tetany in cattle
- ✓ contains a weather proofing agent to repel moisture in a paddock adlib feed situation
- ✓ it can be used for all types of cattle that are mineral deficient grazing in poorer country

Directions of Use: Feed in a well drained trough which is protected from the weather

Average Consumption Rate: 80-120 grams / head / day

TYPICAL ANALYSIS PER KG

Total Protein (Min)	0 %	Cobalt (Min)	80 mg/kg
Crude Protein (Min)	0 %	Copper (Min)	1 600 mg/kg
Equivalent Crude Protein (Min)	0 %	Iodine (Min)	40 mg/kg
Urea (Max)	0 %	Iron (Min)	5 mg/kg
Crude Fat (Min)	0 %	Manganese (Min)	1 600 mg/kg
Crude Fibre (Max)	0 %	Selenium (Min)	40 mg/kg
Salt (Max)	25 %	Zinc (Min)	6 400 mg/kg
Calcium (Min)	100 g/kg	Vitamin A (Min)	416 000 IU/kg
Magnesium (Min)	150 g/kg	Vitamin D (Min)	32 000 IU/kg
Phosphorous (Min)	50 g/kg	Vitamin E (Min)	960 mg/kg
Sulphur (Min)	25 g/kg	Mj/kg	0 Mj/kg
Active Constituent	NIL		



BLOATLIQ

PBA Bloatliq is a loose mix fed to cattle grazing lush spring/summer pastures as an aid in the control of bloat.

- ✓ aids in balancing minerals, in particular calcium and magnesium, which are tied up from high soluble protein, high potassium and high lipids in green feed
- ✓ maintains a correct sulphur/nitrogen ratio to enable livestock to improve their performance
- ✓ contains oil and anti-foaming agent

Directions of Use: Feed in a well drained trough that is protected from weather

Average Consumption Rate: 200-400 grams / head / day

Typical Analysis per kg

Total Protein (Min)	10 %	Cobalt (Min)	10 mg/kg
Crude Protein (Min)	10 %	Copper (Min)	161 mg/kg
Equivalent Crude Protein (Min)	0 %	Iodine (Min)	5 mg/kg
Urea (Max)	0 %	Iron (Min)	22 mg/kg
Crude Fat (Min)	6.5 %	Manganese (Min)	210 mg/kg
Crude Fibre (Max)	5 %	Selenium (Min)	5 mg/kg
Salt (Max)	7.5 %	Zinc (Min)	1 011 mg/kg
Calcium (Min)	30 g/kg	Vitamin A (Min)	52 000 IU/kg
Magnesium (Min)	16 g/kg	Vitamin D (Min)	4 000 IU/kg
Phosphorous (Min)	6 g/kg	Vitamin E (Min)	120 mg/kg
Sulphur (Min)	21 g/kg	Mj/kg	8 Mj/kg
Active Constituent	500 mg/kg Monensin		

Please note: Analysis & materials used are subject to availability of ingredients due to seasonal variations.



Hylick Hi Phos is a loose lick especially formulated for supplementing cows & heifers in phosphorus deficient country to assist in improving:

- ✓ Overall herd health
- ✓ Conception rates
- ✓ Phosphorus & trace mineral deficiency

Contains Alltech Bioplex High Five®, a highly available form of organic trace elements. Chelated organic trace minerals are better absorbed & utilised, leading to significant improvements in health & performance when compared with inorganic minerals.

Directions of Use: Feed in a well drained trough which is protected from the weather

Average Consumption Rate: 50-200 grams / head / day

TYPICAL ANALYSIS PER KG

Total Protein (Min)	6 %	Cobalt (Min)	36 mg/kg
Crude Protein (Min)	6 %	Copper (Min)	711 mg/kg
Equivalent Crude Protein (Min)	0 %	Iodine (Min)	15 mg/kg
Urea (Max)	0 %	Iron (Min)	31 mg/kg
Crude Fat (Min)	2 %	Manganese (Min)	670 mg/kg
Crude Fibre (Max)	2 %	Selenium (Min)	16.5 mg/kg
Salt (Max)	5 %	Zinc (Min)	2768 mg/kg
Calcium (Min)	166 g/kg	Vitamin A (Min)	156 000 IU/kg
Magnesium (Min)	12 g/kg	Vitamin D (Min)	12 000 IU/kg
Phosphorous (Min)	91 g/kg	Vitamin E (Min)	360 mg/kg
Sulphur (Min)	50 g/kg	Mj/kg	3.5 Mj/kg
Active Constituent	NIL		

Please note: Analysis & materials used are subject to availability of ingredients due to seasonal variations.



HYLICK PRODUCTION 4%

Hylick Production provides higher levels of supplementary bypass protein and energy to promote growth in livestock.

- ✓ Ideal to grow out heifers and young bulls
- ✓ Must be fed with an adequate supply of paddock forage
- ✓ Maximises weight gain in stock to promote a quicker turnoff of animals

Directions of Use: Feed in a well drained trough which is protected from the weather

Average Consumption Rate: 1 – 1.5 kilograms / head / day

TYPICAL ANALYSIS PER KG

Total Protein (Min)	25 %	Cobalt (Min)	4 mg/kg
Crude Protein (Min)	17 %	Copper (Min)	70 mg/kg
Equivalent Crude Protein (Min)	8 %	Iodine (Min)	2 mg/kg
Urea (Max)	4 %	Iron (Min)	108 mg/kg
Crude Fat (Min)	6 %	Manganese (Min)	132 mg/kg
Crude Fibre (Max)	11 %	Selenium (Min)	2 mg/kg
Salt (Max)	5 %	Zinc (Min)	424 mg/kg
Calcium (Min)	32 g/kg	Vitamin A (Min)	20 000 IU/kg
Magnesium (Min)	5 g/kg	Vitamin D (Min)	1 600 IU/kg
Phosphorous (Min)	13 g/kg	Vitamin E (Min)	48 mg/kg
Sulphur (Min)	10 g/kg	Mj/kg	8 mj/kg
Active Constituent	NIL		

Please note: Analysis & materials used are subject to availability of ingredients due to seasonal variations.

Good nutritional advice and great product is what keeps Simon Jolly coming back to PBA Feeds.

Simon and his partner, Mary Quilty, operate Highlander Grazing on their 1903 hectare property in the Ben Lomond district of the New South Wales New England. They run up to 800 breeders in a good season, on their cow and calf breeding operation.

"We mainly have Shorthorn/Hereford/Angus cross cattle and at the moment have about 600 females," Mr Jolly said. "We feed a few early weaned cattle, but sell off most of our cattle as weaners at about 230kg on average."

Mr Jolly uses PBA Feeds' **New England Loose Lick** range as the season deteriorates. "As the grass dries off, we like to get some protein into our cattle through the PBA loose licks," he said. "Through summer we feed PBA Feed's **Water Proof Cattle Mineral Mix**, to keep the macro and trace minerals into them."

Mr Jolly is very impressed with the PBA Feeds philosophy. "I love the PBA products, as they do exactly what they say they do," Mr Jolly said. "We have had no problems with them, and have been using PBA Feeds for the past 8 years. We get great nutritional advice from Steve Mantova, and wonderful back-up service from Phil Best."



Hylick Sheep is a loose lick especially formulated for supplementing sheep on dry feed and green feed (for 0% urea):

- ✓ will greatly assist in maintaining body weight & correcting vitamin and mineral deficiency in sheep
- ✓ contains bypass proteins & urea (in 2% & 4%) which encourages grazing & better utilisation of dry feed
- ✓ contains Bovatec® to improve feed efficiency
- ✓ may assist in maximising weight gains
- ✓ assists in improving fertility & lambing percentages

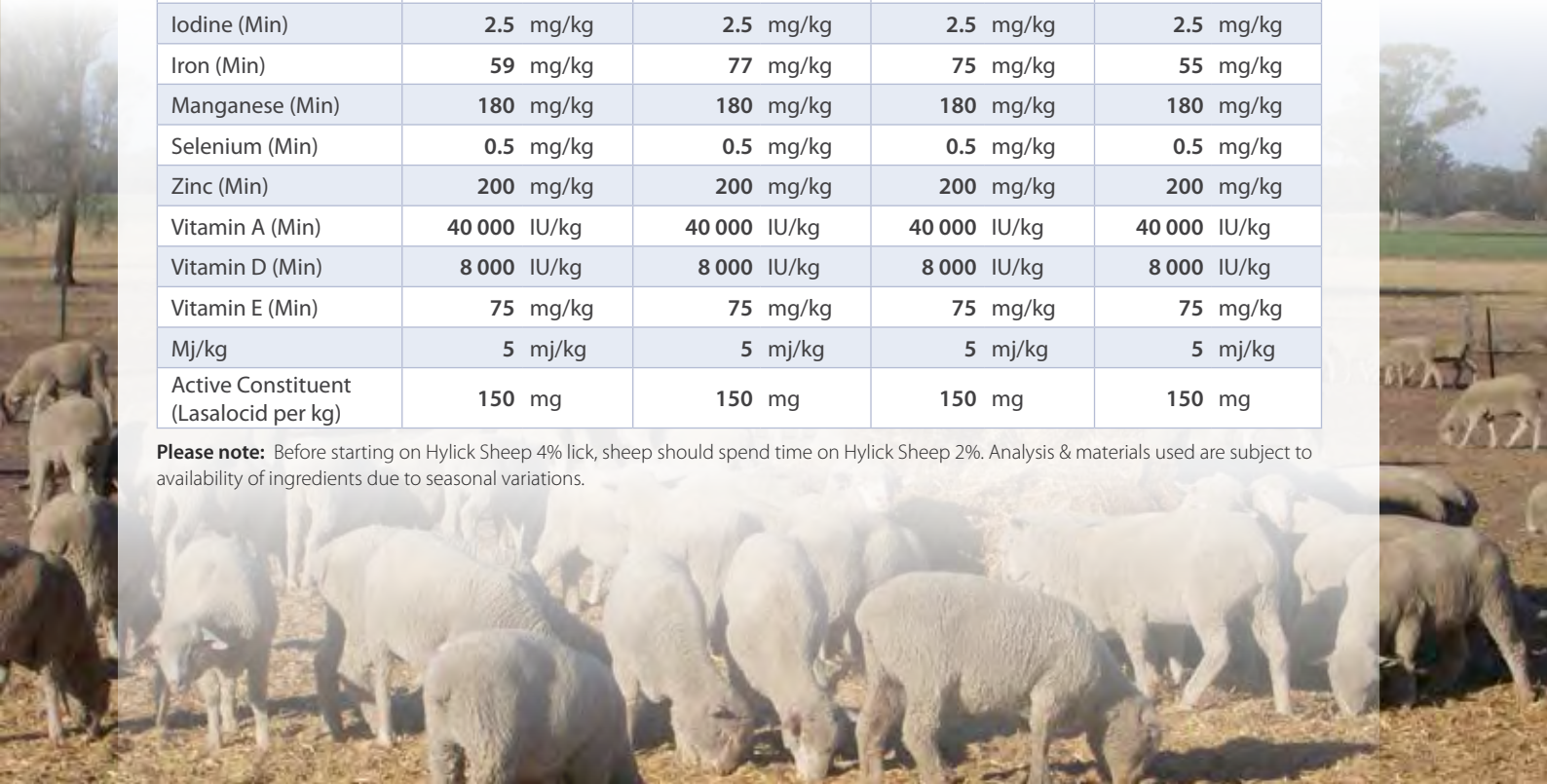
Directions of Use: Feed in a well drained trough which is protected from the weather

Average Consumption Rate: 50 – 75 grams / head / day

TYPICAL ANALYSIS PER KG

Product	Sheep 0 %	Sheep 2%	Sheep 4%	Sheep 8%
Total Protein (Min)	10 %	13 %	23 %	37 %
Crude Protein (Min)	10 %	7.3 %	7 %	9 %
Equivalent Crude Protein (Min)	0 %	5.7 %	16 %	28 %
Urea (Max)	0 %	2 %	4 %	8 %
Crude Fat (Min)	4 %	5 %	5 %	3 %
Crude Fibre (Max)	4 %	4 %	4 %	4 %
Salt (Max)	25 %	25 %	25 %	25 %
Calcium (Min)	85 g/kg	88 g/kg	77 g/kg	70 g/kg
Magnesium (Min)	30 g/kg	20 g/kg	20 g/kg	10 g/kg
Phosphorous (Min)	10 g/kg	10 g/kg	10 g/kg	10 g/kg
Sulphur (Min)	10 g/kg	20 g/kg	25 g/kg	30 g/kg
Cobalt (Min)	5 mg/kg	5 mg/kg	5 mg/kg	5 mg/kg
Copper (Min)	4 mg/kg	4 mg/kg	4 mg/kg	4 mg/kg
Iodine (Min)	2.5 mg/kg	2.5 mg/kg	2.5 mg/kg	2.5 mg/kg
Iron (Min)	59 mg/kg	77 mg/kg	75 mg/kg	55 mg/kg
Manganese (Min)	180 mg/kg	180 mg/kg	180 mg/kg	180 mg/kg
Selenium (Min)	0.5 mg/kg	0.5 mg/kg	0.5 mg/kg	0.5 mg/kg
Zinc (Min)	200 mg/kg	200 mg/kg	200 mg/kg	200 mg/kg
Vitamin A (Min)	40 000 IU/kg	40 000 IU/kg	40 000 IU/kg	40 000 IU/kg
Vitamin D (Min)	8 000 IU/kg	8 000 IU/kg	8 000 IU/kg	8 000 IU/kg
Vitamin E (Min)	75 mg/kg	75 mg/kg	75 mg/kg	75 mg/kg
Mj/kg	5 mj/kg	5 mj/kg	5 mj/kg	5 mj/kg
Active Constituent (Lasalocid per kg)	150 mg	150 mg	150 mg	150 mg

Please note: Before starting on Hylick Sheep 4% lick, sheep should spend time on Hylick Sheep 2%. Analysis & materials used are subject to availability of ingredients due to seasonal variations.



HYLICK WP SHEEP MINERALS

Hylick WP Sheep Minerals is a loose lick with a balanced level of macro and micro minerals to maximise performance of sheep on improved pastures.

- ✓ aids in the prevention of grass tetany
- ✓ contains a weatherproofing agent to repel moisture in a paddock adlib feed situation

Directions of Use: Feed in a well drained trough that is protected from weather

Average Consumption Rate: 10-20 grams / head / day

TYPICAL ANALYSIS PER KG

Total Protein (Min)	0 %	Cobalt (Min)	40 mg/kg
Crude Protein (Min)	0 %	Copper (Min)	0 mg/kg
Equivalent Crude Protein (Min)	0 %	Iodine (Min)	20 mg/kg
Urea (Max)	0 %	Iron (Min)	0.2 mg/kg
Crude Fat (Min)	0 %	Manganese (Min)	1 204 mg/kg
Crude Fibre (Max)	0 %	Selenium (Min)	4 mg/kg
Salt (Max)	25 %	Zinc (Min)	1 600 mg/kg
Calcium (Min)	100 g/kg	Vitamin A (Min)	321 000 IU/kg
Magnesium (Min)	150 g/kg	Vitamin D (Min)	64 000 IU/kg
Phosphorous (Min)	50 g/kg	Vitamin E (Min)	600 mg/kg
Sulphur (Min)	15 g/kg	Mj/kg	0 mj/kg
Active Constituent	Nil		





SPRINGER MIX

A supplement based on anionic (acid) salts and very high levels of vitamins & minerals to be fed to springing cows to:

- ✓ provide the cow with extra minerals to build up the immune system and provide the extra nutrients for a strong, healthy calf
- ✓ helps make the blood acidic which stimulates the cow to mobilise calcium which is necessary for making muscles contract and reduce the effects of milk fever
- ✓ contains high levels of vitamins & trace minerals to help reduce the effects of milk fever & other metabolic problems such as ketosis, retained foetal membranes & metritis

Directions of Use: 200 grams per cow per day mixed with 2kg of cracked grain. Feed for 14-21 days before calving.

TYPICAL ANALYSIS PER KG

Total Protein (Min)	1.2 %	Cobalt (Min)	50 mg/kg
Crude Protein (Min)	0 %	Copper (Min)	1 000 mg/kg
Equivalent Crude Protein (Min)	0 %	Iodine (Min)	25 mg/kg
Urea (Max)	0 %	Iron (Min)	7 mg/kg
Crude Fat (Min)	0 %	Manganese (Min)	1 000 mg/kg
Crude Fibre (Max)	0 %	Selenium (Min)	25 mg/kg
Salt (Max)	0 %	Zinc (Min)	4 000 mg/kg
Calcium (Min)	130 g/kg	Vitamin A (Min)	240 000 IU/kg
Magnesium (Min)	50 g/kg	Vitamin D (Min)	20 000 IU/kg
Phosphorous (Min)	0 g/kg	Vitamin E (Min)	600 mg/kg
Sulphur (Min)	120 g/kg	Mj/kg	1.5 mj/kg
Active Constituent	1 000 mg/kg Monensin		



CALF VIT-A-MIN

A vitamin, mineral & trace element supplement to be blended in milk or grain for young calves.

- ✓ assists with calf health & development
- ✓ contains Rumensin® to help control coccidiosis

Directions of Use: 20 grams per calf per day thoroughly mixed into milk or feed

TYPICAL ANALYSIS PER KG

Total Protein (Min)	9 %	Cobalt (Min)	100 mg/kg
Crude Protein (Min)	0 %	Copper (Min)	1 000 mg/kg
Equivalent Crude Protein (Min)	0 %	Iodine (Min)	100 mg/kg
Urea (Max)	0 %	Iron (Min)	5 000 mg/kg
Crude Fat (Min)	1 %	Manganese (Min)	3 000 mg/kg
Crude Fibre (Max)	0 %	Selenium (Min)	10 mg/kg
Salt (Max)	5 %	Zinc (Min)	3 800 mg/kg
Calcium (Min)	0.1 g/kg	Vitamin A (Min)	1 000 000 IU/kg
Magnesium (Min)	5 g/kg	Vitamin D (Min)	100 000 IU/kg
Phosphorous (Min)	0.1 g/kg	Vitamin E (Min)	2 000 mg/kg
Sulphur (Min)	5 g/kg	Vitamin K3 (Min)	100 mg/kg
Biotin (Min)	10 mg/kg	Vitamin B1 (Min)	200 mg/kg
D-Calcium Pantothenate (Min)	500 mg/kg	Vitamin B2 (Min)	400 mg/kg
Folic Acid (Min)	100 mg/kg	Vitamin B6 (Min)	200 mg/kg
Niacin (Min)	2 000 mg/kg	Vitamin B12 (Min)	1 mg/kg
Mj/kg	9.5 mj/kg		
Active Constituent	1 500 mg/kg Monensin		

Please note: Analysis & materials used are subject to availability of ingredients due to seasonal variations.



DAIRY PAK

A premix designed to:

- ✓ helps to maintain herd health & fertility in dairy cattle
- ✓ contains all the macro & micro elements required

Directions of Use: 150-200 grams per head per day for dairy cattle

TYPICAL ANALYSIS PER KG

Total Protein (Min)	0 %	Cobalt (Min)	50 mg/kg
Crude Protein (Min)	0 %	Copper (Min)	1 000 mg/kg
Equivalent Crude Protein (Min)	0 %	Iodine (Min)	25 mg/kg
Urea (Max)	0 %	Iron (Min)	1 mg/kg
Crude Fat (Min)	0 %	Manganese (Min)	1 000 mg/kg
Crude Fibre (Max)	0 %	Selenium (Min)	25 mg/kg
Salt (Max)	10 %	Zinc (Min)	4 000 mg/kg
Calcium (Min)	240 g/kg	Vitamin A (Min)	250 000 IU/kg
Magnesium (Min)	57 g/kg	Vitamin D (Min)	20 000 IU/kg
Phosphorous (Min)	36 g/kg	Vitamin E (Min)	600 mg/kg
Sulphur (Min)	26 g/kg	Mj/kg	0.38 mj/kg
Active Constituent	NIL		

Please note: Analysis & materials used are subject to availability of ingredients due to seasonal variations.



DAIRY PAK + RUMENSIN®

A premix designed to:

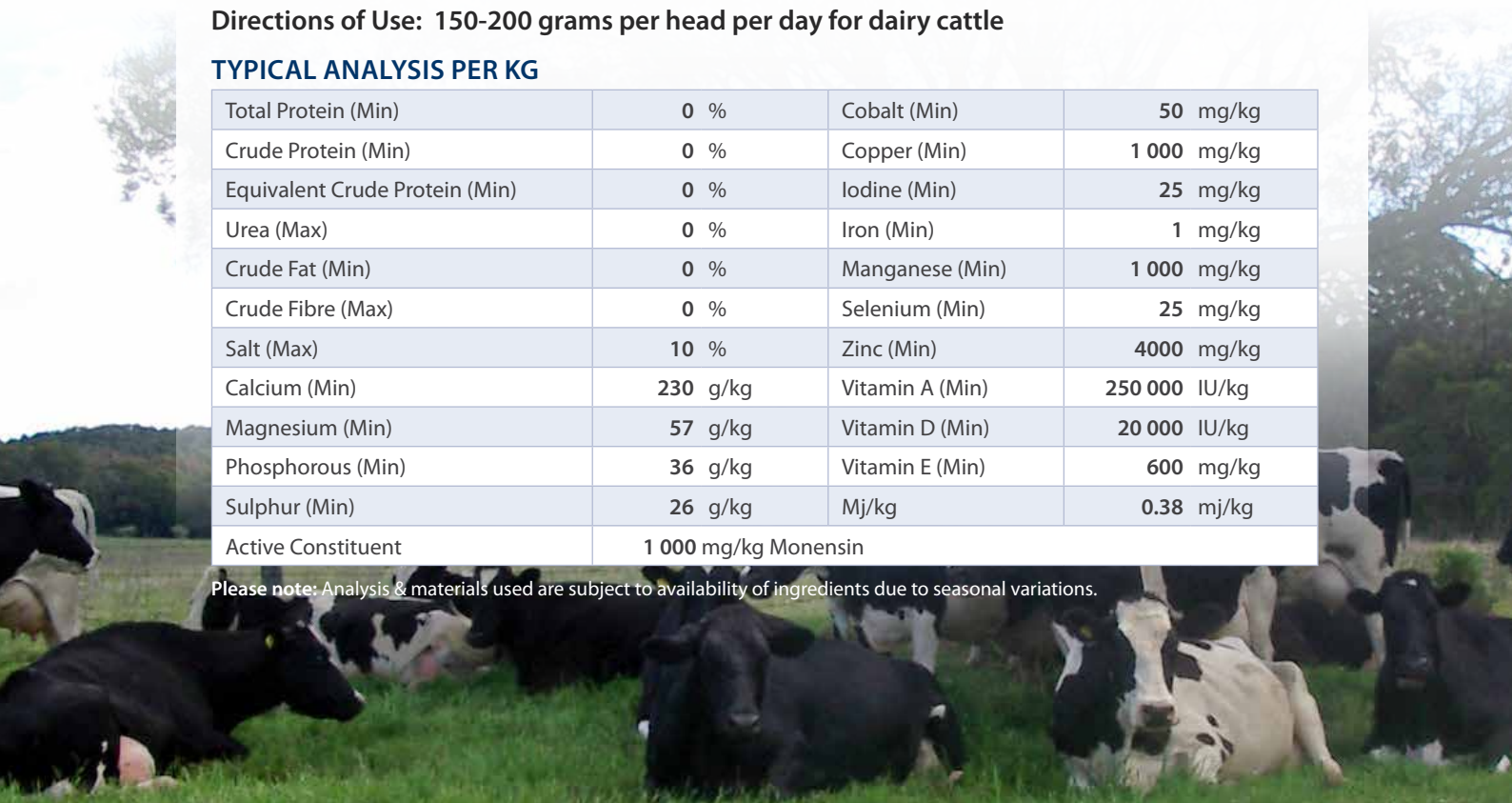
- ✓ helps to maintain herd health & fertility in dairy cattle
- ✓ contains all the macro & micro elements required
- ✓ contains Rumensin® to increase feed efficiency

Directions of Use: 150-200 grams per head per day for dairy cattle

TYPICAL ANALYSIS PER KG

Total Protein (Min)	0 %	Cobalt (Min)	50 mg/kg
Crude Protein (Min)	0 %	Copper (Min)	1 000 mg/kg
Equivalent Crude Protein (Min)	0 %	Iodine (Min)	25 mg/kg
Urea (Max)	0 %	Iron (Min)	1 mg/kg
Crude Fat (Min)	0 %	Manganese (Min)	1 000 mg/kg
Crude Fibre (Max)	0 %	Selenium (Min)	25 mg/kg
Salt (Max)	10 %	Zinc (Min)	4000 mg/kg
Calcium (Min)	230 g/kg	Vitamin A (Min)	250 000 IU/kg
Magnesium (Min)	57 g/kg	Vitamin D (Min)	20 000 IU/kg
Phosphorous (Min)	36 g/kg	Vitamin E (Min)	600 mg/kg
Sulphur (Min)	26 g/kg	Mj/kg	0.38 mj/kg
Active Constituent	1 000 mg/kg Monensin		

Please note: Analysis & materials used are subject to availability of ingredients due to seasonal variations.





FEEDLOT 1

This product is suitable to be mixed with grain, hay and silage to form a complete and balanced ration for feeding cattle:

- ✓ contains all the vitamins, minerals & some protein needed to balance feedlot rations
- ✓ contains buffers such as sodium bicarb to help control conditions such as acidosis
- ✓ contains Rumensin® for increased feed efficiency
- ✓ No extra buffers required

Directions of Use: Inclusion rate of 40kg into 1 tonne of finished feed

TYPICAL ANALYSIS PER KG

Total Protein (Min)	50 %	Cobalt (Min)	12 mg/kg
Crude Protein (Min)	10 %	Copper (Min)	242 mg/kg
Equivalent Crude Protein (Min)	40 %	Iodine (Min)	6 mg/kg
Urea (Max)	16 %	Iron (Min)	35 mg/kg
Crude Fat (Min)	1.85 %	Manganese (Min)	262 mg/kg
Crude Fibre (Max)	5 %	Selenium (Min)	6 mg/kg
Salt (Max)	7.5 %	Zinc (Min)	967 mg/kg
Calcium (Min)	100 g/kg	Vitamin A (Min)	62 000 IU/kg
Magnesium (Min)	8 g/kg	Vitamin D (Min)	4 800 IU/kg
Phosphorous (Min)	5 g/kg	Vitamin E (Min)	144 mg/kg
Sulphur (Min)	20 g/kg	Mj/kg	2 mj/kg
Active Constituent	500 mg/kg Monensin		

Please note: Analysis & materials used are subject to availability of ingredients due to seasonal variations.



FEEDLOT MACRO

This product is specifically designed for feedlot cattle:

- ✓ contains all the macro & micro elements needed to maintain health in a feedlot situation
- ✓ contains Rumensin® for increased feed efficiency

Directions of Use: Mix 20kg into 1 tonne of finished feed

TYPICAL ANALYSIS PER KG

Total Protein (Min)	0 %	Cobalt (Min)	30 mg/kg
Crude Protein (Min)	0 %	Copper (Min)	601 mg/kg
Equivalent Crude Protein (Min)	0 %	Iodine (Min)	15 mg/kg
Urea (Max)	0 %	Iron (Min)	18 mg/kg
Crude Fat (Min)	0 %	Manganese (Min)	600 mg/kg
Crude Fibre (Max)	0 %	Selenium (Min)	15 mg/kg
Salt (Max)	15 %	Zinc (Min)	2 400 mg/kg
Calcium (Min)	200 g/kg	Vitamin A (Min)	156 000 IU/kg
Magnesium (Min)	42 g/kg	Vitamin D (Min)	12 000 IU/kg
Phosphorous (Min)	23 g/kg	Vitamin E (Min)	360 mg/kg
Sulphur (Min)	26 g/kg	Mj/kg	2 mj/kg
Active Constituent	1 000 mg/kg Monensin		

Please note: Analysis & materials used are subject to availability of ingredients due to seasonal variations.



CATTLE CONCENTRATE

This product is suitable to be mixed with grain, hay and silage to form a complete and balanced ration for feeding cattle:

- ✓ contains all the vitamins, minerals & some protein needed to balance feedlot rations
- ✓ contains buffers such as sodium bicarb to help control conditions such as acidosis
- ✓ contains Rumensin® for increased feed efficiency

Directions of Use: Inclusion rate of 50kg into 1 tonne of finished feed

TYPICAL ANALYSIS PER KG

Total Protein (Min)	50 %	Cobalt (Min)	10 mg/kg
Crude Protein (Min)	10 %	Copper (Min)	202 mg/kg
Equivalent Crude Protein (Min)	40 %	Iodine (Min)	5 mg/kg
Urea (Max)	14 %	Iron (Min)	35 mg/kg
Crude Fat (Min)	2.5 %	Manganese (Min)	217 mg/kg
Crude Fibre (Max)	5 %	Selenium (Min)	5 mg/kg
Salt (Max)	7.5 %	Zinc (Min)	807 mg/kg
Calcium (Min)	90 g/kg	Vitamin A (Min)	52 000 IU/kg
Magnesium (Min)	7 g/kg	Vitamin D (Min)	4 000 IU/kg
Phosphorous (Min)	10 g/kg	Vitamin E (Min)	120 mg/kg
Sulphur (Min)	13 g/kg	Mj/kg	2.4 mj/kg
Active Constituent	500 mg/kg Monensin		

Please note: Analysis & materials used are subject to availability of ingredients due to seasonal variations.



SHEEP CONCENTRATE

This product is suitable to be mixed with grain, hay and silage to form a complete and balanced ration for feeding sheep:

- ✓ contains all the vitamins, minerals & some protein needed to balance feedlot rations
- ✓ contains buffers such as sodium bicarb to control conditions such as acidosis
- ✓ contains Bovatec® for increased feed efficiency

Directions of Use: Inclusion rate of 75kg into 1 tonne of finished feed

TYPICAL ANALYSIS PER KG

Total Protein (Min)	45 %	Cobalt (Min)	10 mg/kg
Crude Protein (Min)	22 %	Copper (Min)	4 mg/kg
Equivalent Crude Protein (Min)	23 %	Iodine (Min)	5 mg/kg
Urea (Max)	8 %	Iron (Min)	83 mg/kg
Crude Fat (Min)	3 %	Manganese (Min)	331 mg/kg
Crude Fibre (Max)	5 %	Selenium (Min)	1 mg/kg
Salt (Max)	10 %	Zinc (Min)	409 mg/kg
Calcium (Min)	56 g/kg	Vitamin A (Min)	60 000 IU/kg
Magnesium (Min)	5 g/kg	Vitamin D (Min)	12 000 IU/kg
Phosphorous (Min)	7 g/kg	Vitamin E (Min)	60 mg/kg
Sulphur (Min)	26 g/kg	Mj/kg	3 mj/kg
Active Constituent	300 mg/kg Lasalocid		

Please note: Analysis & materials used are subject to availability of ingredients due to seasonal variations.



MOLASSES FORTIFIER

A concentrate to be used for mixing with molasses to provide a balanced supplement for cattle to maintain bodyweight in a grazing situation:

- ✓ contains Rumensin® for increased feed efficiency

Directions of Use: Mix 50 kilograms into 200 litres of Molasses

TYPICAL ANALYSIS PER KG

Total Protein (Min)	60 %	Cobalt (Min)	20 mg/kg
Crude Protein (Min)	9 %	Copper (Min)	401 mg/kg
Equivalent Crude Protein (Min)	51 %	Iodine (Min)	10 mg/kg
Urea (Max)	16 %	Iron (Min)	29 mg/kg
Crude Fat (Min)	3 %	Manganese (Min)	400 mg/kg
Crude Fibre (Max)	2 %	Selenium (Min)	10 mg/kg
Salt (Max)	7.5 %	Zinc (Min)	1610 mg/kg
Calcium (Min)	100 g/kg	Vitamin A (Min)	104 000 IU/kg
Magnesium (Min)	1 g/kg	Vitamin D (Min)	8 000 IU/kg
Phosphorous (Min)	10 g/kg	Vitamin E (Min)	240 mg/kg
Sulphur (Min)	30 g/kg	Mj/kg	4 mj/kg
Active Constituent	400 mg/kg Monensin		

Please note: Analysis & materials used are subject to availability of ingredients due to seasonal variations.





YARD WEANING MIX

Formulated for feeding calves in a yard weaning situation.

- ✓ contains specialised nutrients to minimise stress in calves
- ✓ Contains Rumensin® to improve feed efficiency

Directions of Use: Feed at 1-1.5kg/head/day plus roughage.

Must be fed with adequate fibre such as grass, hay or silage.

TYPICAL ANALYSIS PER KG

Total Protein (Min)	16 %	Cobalt (Min)	3.07 mg/kg
Crude Protein (Min)	16 %	Copper (Min)	23 mg/kg
Equivalent Crude Protein (Min)	0 %	Iodine (Min)	1.1 mg/kg
Urea (Max)	0 %	Iron (Min)	68 mg/kg
Crude Fat (Min)	2.37 %	Manganese (Min)	52 mg/kg
Crude Fibre (Max)	4 %	Selenium (Min)	0.67 mg/kg
Salt (Max)	1.2 %	Zinc (Min)	152.01 mg/kg
Calcium (Min)	9.5 g/kg	Vitamin A (Min)	55 000 IU/kg
Magnesium (Min)	10.1 g/kg	Vitamin D (Min)	10 000 IU/kg
Phosphorous (Min)	3.9 g/kg	Vitamin E (Min)	56 mg/kg
Sulphur (Min)	3.2 g/kg		
Mj/kg	10.37 mg/kg		
Active Constituent	40 mg/kg Monensin		

Please note: Analysis & materials used are subject to availability of ingredients due to seasonal variations.

WARNING: DO NOT FEED TO DOGS, POULTRY, HORSES OR OTHER EQUINES AS IT MAY PROVE FATAL



CREEP MIX 18%

Suitable for feeding calves from 80kg - 150kg live weight in a paddock supplementation or yard weaning situation.

- ✓ Contains Rumensin® for increased feed efficiency

Directions of Use: Feed at 1-2% of bodyweight plus roughage. 1.5kg per head per day

Must be fed with adequate fibre such as grass, hay or silage.

TYPICAL ANALYSIS PER KG

Total Protein (Min)	18 %	Cobalt (Min)	3 mg/kg
Crude Protein (Min)	18 %	Copper (Min)	43 mg/kg
Equivalent Crude Protein (Min)	0 %	Iodine (Min)	2 mg/kg
Urea (Max)	0 %	Iron (Min)	102 mg/kg
Crude Fat (Min)	3.74 %	Manganese (Min)	67 mg/kg
Crude Fibre (Max)	- %	Selenium (Min)	0.3 mg/kg
Salt (Max)	0.6 %	Zinc (Min)	159 mg/kg
Calcium (Min)	25 g/kg	Vitamin A (Min)	10 000 IU/kg
Magnesium (Min)	6 g/kg	Vitamin D (Min)	2 000 IU/kg
Phosphorous (Min)	6 g/kg	Vitamin E (Min)	12 mg/kg
Sulphur (Min)	4 g/kg	Potassium (Min)	6 g/kg
Sodium (Min)	3 g/kg	Chloride (Min)	8 g/kg
Digestible Energy	10.48 Mj/kg	Active Constituent	20 mg/kg Monensin

Please note: Analysis & materials used are subject to availability of ingredients due to seasonal variations.



WEANER MIX 16%

Suitable for feeding calves from 150kg - 250kg live weight in a paddock supplementation or yard weaning situation.

- ✓ Contains Rumensin® to improve feed efficiency

Directions of Use: Feed at 1-2% of bodyweight plus roughage. 2.0kg per head per day
Must be fed with adequate fibre such as grass, hay or silage.

TYPICAL ANALYSIS PER KG

Total Protein (Min)	16 %	Cobalt (Min)	3 mg/kg
Crude Protein (Min)	16 %	Copper (Min)	42 mg/kg
Equivalent Crude Protein (Min)	0 %	Iodine (Min)	2 mg/kg
Urea (Max)	0 %	Iron (Min)	70 mg/kg
Crude Fat (Min)	2.46 %	Manganese (Min)	58 mg/kg
Crude Fibre (Max)	- %	Selenium (Min)	0.2 mg/kg
Salt (Max)	0.6 %	Zinc (Min)	154 mg/kg
Calcium (Min)	9 g/kg	Vitamin A (Min)	10 000 IU/kg
Magnesium (Min)	6 g/kg	Vitamin D (Min)	2 000 IU/kg
Phosphorous (Min)	4 g/kg	Vitamin E (Min)	12 mg/kg
Sulphur (Min)	3 g/kg	Potassium (Min)	3 g/kg
Sodium (Min)	4 g/kg	Chloride (Min)	2 g/kg
Digestible Energy	10.61 MJ/kg	Active Constituent	50 mg/kg Monensin

Please note: Analysis & materials used are subject to availability of ingredients due to seasonal variations.



STUD BULL MIX

PBA Stud Bull Mix is designed to grow and prepare bulls for show or sale.

- ✓ Contains full fat soybean meal as a protein source which contains a readily available profile of amino acids such as lysine and methionine for enhanced muscle development.
- ✓ Contains Rumensin® to improve feed efficiency



Directions of Use: Feed at 1.5-2% of bodyweight plus roughage. 6.0kg per head per day
Must be fed with adequate fibre such as grass, hay or silage.

TYPICAL ANALYSIS PER KG

Total Protein (Min)	16 %	Cobalt (Min)	2 mg/kg
Crude Protein (Min)	11.84 %	Copper (Min)	18 mg/kg
Equivalent Crude Protein (Min)	4.16 %	Iodine (Min)	1 mg/kg
Urea (Max)	0.64 %	Iron (Min)	69 mg/kg
Crude Fat (Min)	3.03 %	Manganese (Min)	36 mg/kg
Crude Fibre (Max)	- %	Selenium (Min)	0.1 mg/kg
Salt (Max)	0.3 %	Zinc (Min)	78 mg/kg
Calcium (Min)	6 g/kg	Vitamin A (Min)	6 400 IU/kg
Magnesium (Min)	5 g/kg	Vitamin D (Min)	1 200 IU/kg
Phosphorous (Min)	3 g/kg	Vitamin E (Min)	16 mg/kg
Sulphur (Min)	2 g/kg	Potassium (Min)	5 g/kg
Sodium (Min)	7 g/kg	Chloride (Min)	3 g/kg
Digestible Energy	11.29 MJ/kg	Active Constituent	20 mg/kg Monensin

Please note: Analysis & materials used are subject to availability of ingredients due to seasonal variations.

Nutritional Secondary Hyperparathyroidism is commonly known as 'Big Head' or 'Bran Disease' and it occurs when there is a calcium imbalance within the horse's diet. Big Head condition can occur in horses when they are:

1. Grazing tropical and sub-tropical grasses that contain high concentrations of oxalates
2. Fed high phosphorous containing diets such as high grain, pollard or bran

Restoring the correct balance of calcium and phosphorous within the horse's blood stream is imperative in the treatment and prevention of Big Head. A calcium supplement with added Vitamin D to promote calcium absorption, such as Hyfeed Big Head Pellets or Big Head Lick should be used to rectify the calcium:phosphorous ratio (2:1 - 3:1) and overcome calcium deficiencies.

Suitable for:

All equines grazing on affected pastures or receiving pollard or bran-based diets, broodmares and young horses.

Benefits for your equine athlete:

- ✓ Balanced calcium to phosphorous ratio
- ✓ Added Vitamin D to promote calcium absorption in the gut
- ✓ Superior supplement for developing bones
- ✓ Easy-to-feed pellet — no mixing required

Hyfeed Big Head Pellets is a blend of the following quality ingredients:

Barley, Soya Hulls, Copra Meal, Di-Calcium Phosphate, Limestone, Extruded Soybean Meal, Acid Buff, Bentonite, Magnesium Oxide, Salt, Water, Vitamin & Mineral Premix, Hy D Premix, Mould Inhibitor.

Please note: Base raw ingredients may gradually change due to season variations

BIG HEAD PELLETS

Directions of Use: Mix 500g - 1kg per head per day

(If Big Head is suspected, consult a Veterinary Surgeon for treatment advice)

TYPICAL ANALYSIS PER KG

Total Protein (Min)	13 %	Copper (Min)	34.5 mg/kg
Crude Fat (Min)	3.5 %	Zinc (Min)	127 mg/kg
Salt (Max)	1.5 %	Selenium (Min)	0.39 mg/kg
Digestible Energy	11.6 MJ/kg	Vitamin A (Min)	19 500 IU/kg
Crude Fibre (Min)	6 %	Vitamin D (Min)	1 950 IU/kg
Calcium (Min)	42 g/kg	Vitamin E (Min)	43 IU/kg
Phosphorus (Min)	12 g/kg	Vitamin K3 (Min)	1.95 mg/kg
Magnesium (Min)	12 g/kg	Vitamin B1 (Min)	3.9 mg/kg
Sodium (Min)	5.2 g/kg	Vitamin B2 (Min)	7.8 mg/kg
Potassium	4.1 g/kg	Vitamin B6 (Min)	3.9 mg/kg
Chloride (Min)	8.3 g/kg	Vitamin B12 (Min)	0.02 mg/kg
Sulphur (Min)	2.14 g/kg	Niacin (Min)	39 mg/kg
Iodine (Min)	3.4 mg/kg	Biotin (Min)	0.2 mg/kg
Iron (Min)	156 mg/kg	D-Calcium Pantothenate (Min)	9.75 mg/kg
Manganese (Min)	146 mg/kg	Folic Acid (Min)	1.95 mg/kg
Cobalt (Min)	2.5 mg/kg		

Please note: Analysis & materials used are subject to availability of ingredients due to seasonal variations.



BIG HEAD LICK

Directions of Use: 200g per head per day

(If Big Head is suspected, consult a Veterinary Surgeon for treatment advice)

TYPICAL ANALYSIS PER KG

Total Protein (Min)	6.5 %	Copper (Min)	33 mg/kg
Crude Fat (Min)	2.86 %	Zinc (Min)	100 mg/kg
Salt (Max)	17.5 %	Selenium (Min)	0.31 mg/kg
Digestible Energy	5.93 Mj/kg	Vitamin A (Min)	30 000 IU/kg
Crude Fibre (Min)	4 %	Vitamin D (Min)	3 000 IU/kg
Calcium (Min)	139.5 g/kg	Vitamin E (Min)	60 IU/kg
Phosphorus (Min)	55.2 g/kg	Vitamin K3 (Min)	3 mg/kg
Magnesium (Min)	5 g/kg	Vitamin B1 (Min)	6 mg/kg
Sodium (Min)	69 g/kg	Vitamin B2 (Min)	12 mg/kg
Potassium	1.4 g/kg	Vitamin B6 (Min)	6 mg/kg
Chloride (Min)	106.4 g/kg	Vitamin B12 (Min)	0.03 mg/kg
Sulphur (Min)	5.8 g/kg	Niacin (Min)	60 mg/kg
Iodine (Min)	3.1 mg/kg	Biotin (Min)	0.3 mg/kg
Iron (Min)	198 mg/kg	D-Calxium Pantothenate (Min)	15 mg/kg
Manganese (Min)	121 mg/kg	Folic Acid (Min)	3 mg/kg
Cobalt (Min)	3.2 mg/kg		

Please note: Analysis & materials used are subject to availability of ingredients due to seasonal variations.





WP HORSE MINERALS

WP Horse Minerals is a loose lick supplement with a balanced level of essential minerals, vitamins and trace elements specifically formulated for horses. The daily addition of WP Horse Minerals will contribute to the healthy growth, development and performance of equines.

Contains a weather-proofing agent to repel moisture in a paddock ad lib feed situation.

Suitable for:

Equines of all ages, ensuring that regardless of age or workload, equines everywhere can receive the best.

Benefits for your equine athlete:

- ✓ Concentrated vitamin and mineral supplement
- ✓ General health and vitality
- ✓ Efficient utilisation of feeds
- ✓ Balances pastures and other feedstuffs

Hyfeed WP Horse Minerals is a blend of the following quality ingredients:

Salt, Di-Calcium Phosphate, Lime, Magnesium Oxide, Molasses, Vitamin & Mineral Premix, Calcium Sterate, Sulphur, Vegetable Oil.

Directions of Use: Ponies: 50g per day, Horses: 100g per day

TYPICAL ANALYSIS PER KG

Total Protein (Min)	0.76 %	Copper (Min)	401.14 mg/kg
Crude Fat (Min)	1.2 %	Zinc (Min)	1 203.74 mg/kg
Salt (Max)	30 %	Selenium (Min)	4.02 mg/kg
Digestible Energy	3.2 MJ/kg	Vitamin A (Min)	401 000 IU/kg
Crude Fibre (Min)	0 %	Vitamin D (Min)	40 100 IU/kg
Calcium (Min)	135.4 g/kg	Vitamin E (Min)	802 IU/kg
Phosphorus (Min)	49.7 g/kg	Vitamin K3 (Min)	40 mg/kg
Magnesium (Min)	57.7 g/kg	Vitamin B1 (Min)	80.2 mg/kg
Sodium (Min)	117.7 g/kg	Vitamin B2 (Min)	160.4 mg/kg
Potassium	0.6 g/kg	Vitamin B6 (Min)	80.2 mg/kg
Chloride (Min)	183.6 g/kg	Vitamin B12 (Min)	0.4 mg/kg
Sulphur (Min)	16.2 g/kg	Niacin (Min)	802 mg/kg
Iodine (Min)	40.1 mg/kg	Biotin (Min)	4 mg/kg
Iron (Min)	2 010.62 mg/kg	D-Calcium Pantothenate (Min)	200.5 mg/kg
Manganese (Min)	1 207.64 mg/kg	Folic Acid (Min)	40.1 mg/kg
Cobalt (Min)	40 mg/kg		

Please note: Analysis & materials used are subject to availability of ingredients due to seasonal variations.





More energy from every mouthful

Rumensin® delivers more from your investment in supplementary feed:

- Improves reproductive performance
- Improves feed efficiency
- Improves growth rates
- Prevents coccidiosis

www.elanco.com.au

Elanco



Rumensin is registered for improved feed efficiency and as an aid in the control of bloat in feedlot cattle; for improved feed efficiency and weight gain and reproductive performance in heifers; and as an aid in the prevention of coccidiosis caused by *Eimeria zuernii* and *Eimeria bovis* in cattle. Elanco®, Rumensin® and the diagonal colour bar are trademarks of Eli Lilly and Company. EAH13330



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