



# OPTI-BALANCE

A comprehensive range of minerals  
for cattle and sheep

**DOWNLAND**<sup>®</sup>  
PARTNERS IN FARMING HEALTH

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## About Downland

Downland is a UK wide network of independently owned agricultural advisors who work together to share knowledge and expertise and to supply a wide range of animal health and nutritional products to farmers. We specialise in the dairy, beef and sheep sectors and strive to offer the best advice to ensure our farmer customers are as efficient and successful as possible.

Founded in 1979, Downland is known for its high quality products, professional, personalised service and ethos of working with farmers to develop strong, long-lasting relationships.

### The Downland Philosophy:

We aim to provide farmers with **THE BEST ADVICE, THE BEST PRODUCTS** and **THE BEST VALUE.**



## THE BEST ADVICE

Research has shown that minerals, trace elements and vitamins are essential nutrients for the health and performance of ruminant livestock.

Whilst grazing, home grown forages and feeds can be a good source of minerals, vitamins and trace elements, they cannot meet all of the animal's requirements, all of the time. Therefore, the provision of accurate mineral supplementation has become even more important for optimal livestock performance and to maximise the animal's potential.

Feeding minerals helps correct deficiencies in grazing, forages and straights to maximise health, fertility and performance.


## THE BEST PRODUCTS

The **OPTI-BALANCE** Mineral Range has been designed to ensure they support optimal health, production and fertility by balancing the known deficiencies in grazing and forage. The range is formulated specifically to suit the requirements of modern high performance units.

Only the highest quality raw materials have been selected for incorporation into the range. Each individual product has been specifically formulated to supply the requirements of the livestock for which it was designed.

## THE BEST VALUE

**OPTI-BALANCE** Mineral Range:

- ✓ Available as in feed or free access.
- ✓  accredited manufacture.
- ✓ Chelated elements are incorporated in specific products to help improve mineral bioavailability.
- ✓ Minerals are palatable and dust free. In Feed minerals contain a level of de-duster to help minimise dust, Free Access Minerals also include a flavour and water proofing agents.
- ✓ All raw materials purchased from source assured suppliers and quality parameters monitored through a documented testing plan.



## Functions of Minerals

Macro minerals, which include Calcium, Phosphorus, Magnesium and Sodium are required by livestock in larger quantities and are vital for good health and growth.

The Trace Elements, including Selenium, Cobalt, Copper, Iodine and Zinc are required in much smaller quantities but are still essential for correct bodily function and productivity.





## Why undertake a Mineral Audit?

Minerals are the basic components of all matter, being a component part of enzymes, hormones, all cells, bone, blood and body fluids. They function in all aspects of life, from hormone and energy production, digestion, muscle contraction, regulation of body fluid and pH levels, to digestion and reproduction.

Minerals are also critical to provide all of the production parameters such as milk, fleece and muscle tissue, as well as normal growth, reproduction, and feed conversion efficiencies required in our production animals.

Minerals and trace elements have three broad types of functions;

1. Structural components of body organs and tissues
2. Constituents of body fluids and tissues as electrolytes concerned with body fluid balance, acid-base balance, membrane

permeability and tissue irritability (including nerve transmission and muscle contraction).

3. Catalysts in enzyme and hormone systems  
Balancing diets for minerals, trace elements and vitamins is therefore as important as ensuring major nutrients such as protein and energy are meeting animal requirements.

Although there are more than 100 mineral elements on earth, only 15 of these are essential for cattle and sheep health and productivity.

These minerals are split into either macro, or major minerals and micro or trace elements. The macro minerals include calcium, magnesium, phosphorus, potassium, sodium and chloride, they are required in relatively large amounts because they are so heavily involved with structure of the



body and are therefore often measured in grams or percent. The micro minerals or trace elements are required in almost minute levels (milligrams), but are still essential for maintenance and production. They include cobalt, copper, selenium, iodine, zinc, chromium, iron, manganese and molybdenum.

Mineral levels of feeds and forages can vary considerably depending on the type of feed and growing location, harvesting technique and storage practices. For example, grasses tend to have low to moderate levels of calcium and phosphorus, whilst legumes are usually high in calcium, cereal grains are low but high in phosphorus. Home grown forages and feeds will make up the majority of diets on farm and given the massive variation that may occur farmers are encouraged to get them analysed for mineral levels.

### The Downland Mineral Audit Service

A free of charge mineral audit service\* is available via your local Downland advisor.

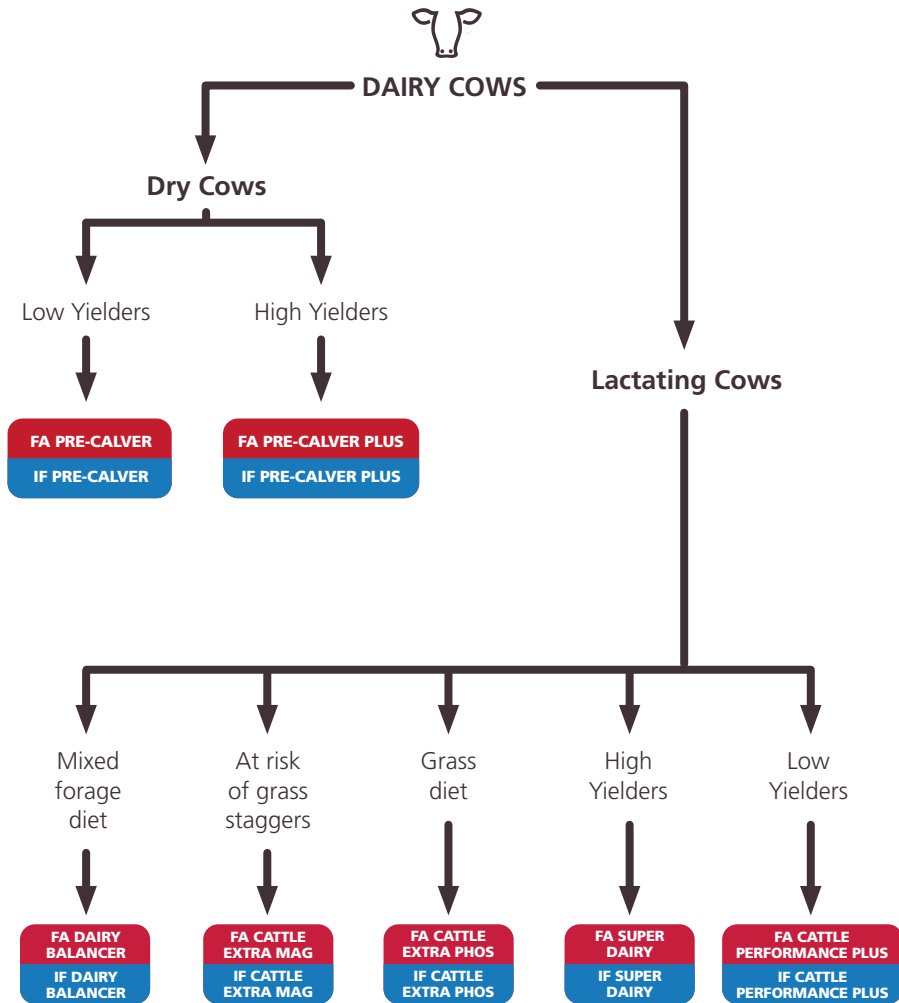
The mineral audit service is recommended to provide the information needed to optimise mineral usage on farm, reducing costs and environmental wastage whilst maximising performance.

Downland have a comprehensive range of minerals, or bespoke minerals that can be formulated to match precisely the needs of the individual farm livestock and management system identified in the audit.

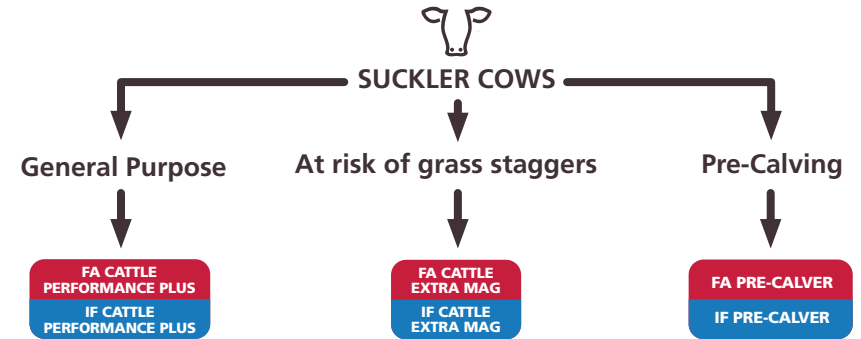
\*While stocks last. Terms and Conditions apply.

# Selecting the right **OPTI-BALANCE** Mineral for your system

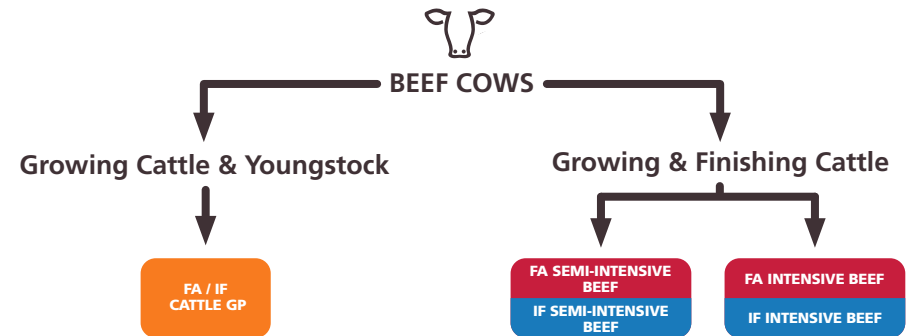
## Dairy Mineral Selector



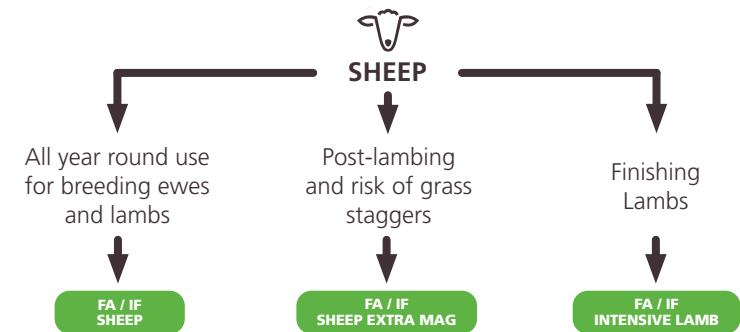
## Suckler Mineral Selector



## Beef Mineral Selector



## Sheep Mineral Selector





# Dairy Mineral Range



## Dry Cows



### PRE-CALVER

Formulated for Low Yielders

Designed to meet the requirements of the dry cow and calf during the last 6 weeks of pregnancy. This low calcium mineral will help to prepare the cow for the forthcoming lactation.

Feed throughout the dry period until just prior to calving, when a lactation mineral should then be provided.



### PRE-CALVER PLUS

Formulated for High Yielders

A high specification low calcium dry cow mineral designed to help support the higher yielding dairy cow.

High levels of Vitamin E and the inclusion of highly bio-available Availa Zinc helps support immune status for where there is a risk of mastitis.

## Lactating Cows



### DAIRY BALANCER

Formulated for cows on a mixed forage diet

A high specification mineral designed to balance dairy rations that include a high proportion of maize or wholecrop silage.



### CATTLE EXTRA MAG

Formulated for use where there is risk of grass staggers

A high magnesium mineral ideal for feeding during the spring and autumn periods when grass staggers can be a risk.

A daily intake of 150g per head / day will provide the recommended intake of 30g magnesium per head / day.

## Lactating Cows continued



### CATTLE EXTRA PHOS

Formulated for cows on a grass diet

Designed to balance home grown and purchased feeds, which may contain low levels of phosphorus and trace elements.

High phosphorus levels are included to help boost growth and production.



### SUPER DAIRY

Formulated for High Yielders

High yielding dairy cows will benefit from this specialist dairy mineral that is particularly suitable for feeding alongside mixed forages.

The product contains high levels of phosphorus and chelated copper and zinc. High levels of protected selenium and Vitamin E are included to help support the immune system.

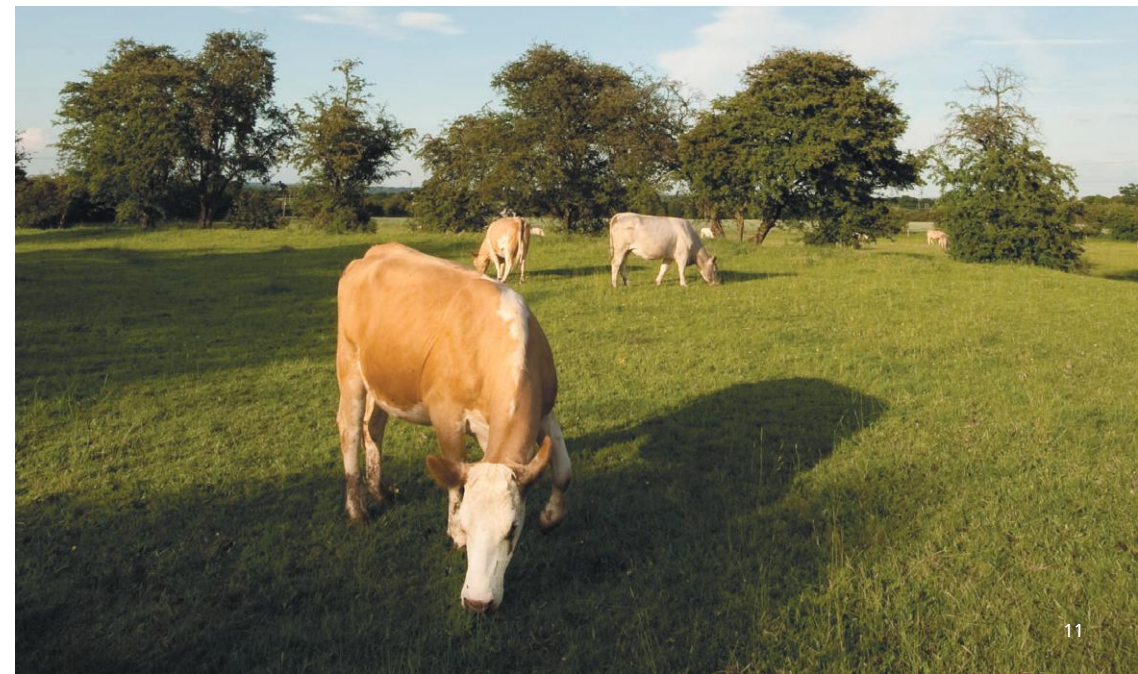


### CATTLE PERFORMANCE PLUS

Formulated for Low Yielders

A balanced mineral with elevated levels of Vitamin E, selenium and copper.

This mineral is suitable for dairy cows, suckler cows, store cattle and replacement stock.



## Dairy Mineral Analysis

	PRE-CALVER	PRE-CALVER PLUS	DAIRY BALANCER	CATTLE EXTRA MAG	CATTLE EXTRA PHOS	SUPER DAIRY	CATTLE PERFORMANCE PLUS
Calcium %	2	2	23	13	20	25	22.5
Phosphorus %	4	6	5	2	7	5	3
Magnesium %	15	15	5	20	4	5	5
Sodium %	12	8	6	8	8	4	8
Selenium mg/kg	30	35*	35	30	30	35*	30
Cobalt mg/kg	50	50	70	50	50	70	50
Iodine mg/kg	400	300	400	250	250	450	250
Manganese mg/kg	2,500	2,500	3,000	2,000	2,500	3,000	2,500
Zinc mg/kg	6,000	6000**	6,000**	5,000	5,000	6,000**	5,000
Copper mg/kg	1,750	1750	1,750***	1,500	1,500	1,750***	1,750***
Copper (Multiple Sources)	✓	✓	-	-	-	✓	✓
Vitamin A iu/kg	400,000	400000	500,000	250,000	250,000	425,000	250,000
Vitamin D <sub>3</sub> iu/kg	100,000	100000	100,000	64,000	64,000	80,000	75,000
Vitamin E iu/kg	3,000	5000	3,000	500	500	2,500	1,250
Shelf life (months)	12	12	6	12	12	6	12
Pack size (kgs)	25	25	25	25	25	25	25
Feeding rate (g/h/d)	< 150	< 150	< 150	< 150	< 150	< 150	< 150
Flavouring (FA only)	✓	✓	✓	✓	✓	✓	✓

\* includes protected selenium \*\* includes chelated zinc \*\*\* includes chelated copper

## Feeding Guidelines

### Free Access:

- Offer in a free-draining container to prevent waste.
- Site away from the water source in locations where stock shelter.
- Offer in the ratio of one feeding point per 25 cattle.
- Check regularly to measure consumption of Free Access Minerals.

### In-Feed:

- Usually included at 25kg per tonne of finished feed if restricted.
- Can also be top dressed onto forage or bulk feed.

**Please note:** All minerals are available as 'In-Feed' dust free and palatable or 'Free Access' with additional waterproofing for use outdoors.

## Suckler Cow Mineral Range



### CATTLE PERFORMANCE PLUS

Formulated for general purpose use

A balanced mineral with elevated levels of Vitamin E, selenium and copper.

This mineral is suitable for dairy cows, suckler cows, store cattle and replacement stock.



### CATTLE EXTRA MAG

Formulated for use where there is risk of grass staggers

A high magnesium mineral ideal for feeding during the spring and autumn periods when grass staggers can be a risk.

A daily intake of 150g per head / day will provide the recommended intake of 30g magnesium per head / day.

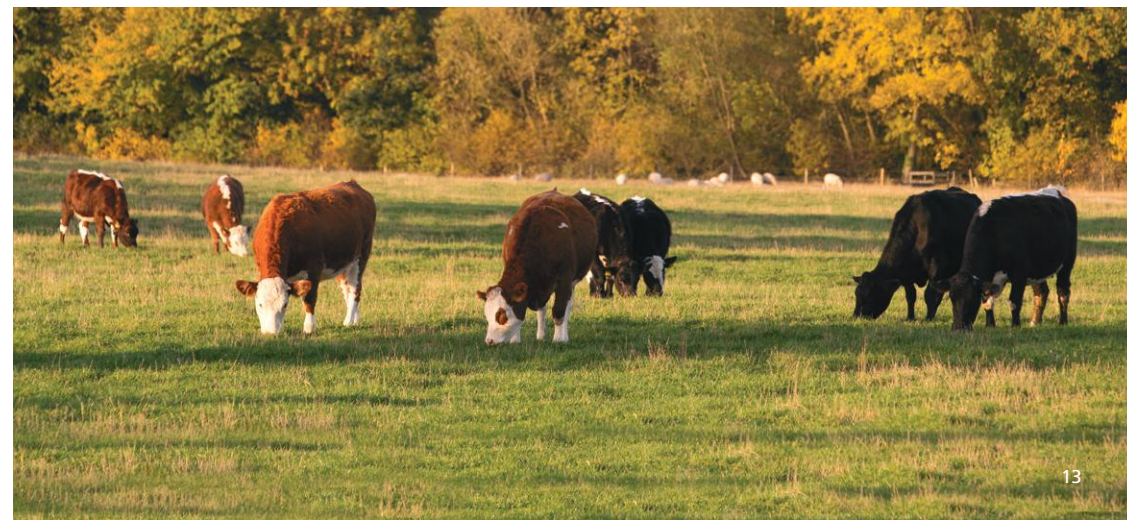


### PRE-CALVER

Formulated for Pre-Calving

Designed to meet the requirements of the dry cow and calf during the last 6 weeks of pregnancy. This low calcium mineral will help to prepare the cow for the forthcoming lactation.

Feed throughout the dry period until just prior to calving, when a lactation mineral should then be provided.





## Suckler Cow Mineral Analysis

	CATTLE PERFORMANCE PLUS	CATTLE EXTRA MAG	PRE-CALVER
Calcium %	22.5	13	2
Phosphorus %	3	2	4
Magnesium %	5	20	15
Sodium %	8	8	12
Selenium mg/kg	30*	30*	30*
Cobalt mg/kg	50	50	50
Iodine mg/kg	250	250	400
Manganese mg/kg	2,500	2,000	2,500
Zinc mg/kg	5,000**	5,000**	6,000**
Copper mg/kg	1,750***	1,500	1,750***
Copper (Multiple Sources)	✓	-	✓
Vitamin A iu/kg	250,000	250,000	400,000
Vitamin D <sub>3</sub> iu/kg	75,000	64,000	100,000
Vitamin E iu/kg	1,250	500	3,000
Shelf life (months)	12	12	12
Pack size (kgs)	25	25	25
Feeding rate (g/h/d)	< 150	< 150	< 150
Flavouring (FA only)	✓	✓	✓

\* includes protected selenium \*\* includes chelated zinc \*\*\* includes chelated copper

## Feeding Guidelines

### Free Access:

- Offer in a free-draining container to prevent waste.
- Site away from the water source in locations where stock shelter.
- Offer in the ratio of one feeding point per 25 cattle.
- Check regularly to measure consumption of Free Access Minerals.

### In-Feed:

- Usually included at 25kg per tonne of finished feed if restricted.
- Can also be top dressed onto forage or bulk feed.

**Please note:** All minerals are available as 'In-Feed' dust free and palatable or 'Free Access' with additional waterproofing for use outdoors.

## Beef Cattle Mineral Range



### CATTLE GP

For growing cattle & youngstock

A mineral balanced to support the general health and productivity of a wide range of livestock.

This mineral is suitable for dairy cows, suckler cows, store cattle and replacement stock.



### SEMI-INTENSIVE BEEF

Formulated for finishing cattle  
A balanced mineral specifically formulated for use in semi-intensive beef systems.

Contains no magnesium or phosphorus.

### INTENSIVE BEEF

Formulated for finishing cattle  
Specifically formulated for feeding in intensive cereal-based systems.

Contains no magnesium or phosphorus.

	CATTLE GP	SEMI-INTENSIVE BEEF	INTENSIVE BEEF
Calcium %	22	24	25
Phosphorus %	2.5	2	-
Magnesium %	4	2	0.1
Sodium %	10	10	12
Selenium mg/kg	25	25	25
Cobalt mg/kg	40	20	60
Iodine mg/kg	250	120	200
Manganese mg/kg	2,500	2,000	3,000
Zinc mg/kg	5,000	3,000	4,000
Copper mg/kg	1,250	1,500	1,750
Iron (Iron sulphate) mg/kg	-	1,000	2,000
Vitamin A iu/kg	250,000	320,000	320,000
Vitamin D <sub>3</sub> iu/kg	64,000	80,000	80,000
Vitamin E iu/kg	500	500	2,000
Shelf life (months)	12	12	12
Pack size (kgs)	25	25	25
Feeding rate (g/h/d)	< 150	< 150	< 150
Flavouring (FA only)	✓	✓	✓

## Feeding Guidelines

### Free Access:

- Offer in a free-draining container to prevent waste.
- Site away from the water source in locations where stock shelter.
- Offer in the ratio of one feeding point per 25 cattle.
- Check regularly to measure consumption of Free Access Minerals.

### In-Feed:

- Usually included at 25kg per tonne of finished feed if restricted.
- Can also be top dressed onto forage or bulk feed.

**Please note:** All minerals are available as 'In-Feed' dust free and palatable or 'Free Access' with additional waterproofing for use outdoors.



# Sheep Mineral Range



## Ewes & Lambs



### SHEEP

All year round use for breeding ewes and lambs

Useful for balancing deficiencies in high grass and forage-based diets.

Useful for all classes of sheep.



### SHEEP EXTRA MAG

Formulated for post-lambing and risk of grass staggers

A high magnesium mineral ideal for feeding during the spring to autumn period when grass staggers can be a risk.

A feeding rate of 30g per head / day will provide the recommended intake of 6g magnesium per head / day. This product should not be fed to rams, housed sheep, or intensively reared lambs.

## Finishing Lambs



### INTENSIVE LAMB

Formulated for finishing lambs

Designed to meet the requirements of intensively reared lambs, this mineral is formulated without added magnesium to help reduce the incidence or urinary calculi.

Contains added Vitamin B1 for where there is a risk of CNN (cerebrocortical necrosis) and Vitamin B12 to help support energy metabolism.

## Sheep Mineral Analysis

	SHEEP	SHEEP EXTRA MAG	INTENSIVE LAMB
Calcium %	23	13	23.5
Phosphorus %	4	2	-
Magnesium %	4	20	0.10
Sodium %	8	8	10
Selenium mg/kg	25	20	20
Cobalt mg/kg	50	50	25
Iodine mg/kg	300	300	200
Manganese mg/kg	2,500	2,500	2,000
Zinc mg/kg	4,000	4,000	2,500
Iron (Iron sulphate) mg/kg	1,000	1,000	-
Vitamin A iu/kg	300,000	300,000	300,000
Vitamin D <sub>3</sub> iu/kg	64,000	64,000	60,000
Vitamin E iu/kg	3,000	800	1,000
Vitamin B <sub>1</sub> iu/kg	-	-	100
Vitamin B <sub>12</sub> iu/kg	-	-	1,000
Ammonium chloride	-	-	✓
Shelf life (months)	12	12	12
Pack size (kgs)	25	25	25
Feeding rate (g/h/d)	25	< 30	< 15
Flavouring (FA only)	✓	✓	✓

## Feeding Guidelines

### Free Access:

- Offer in a free-draining container to prevent waste.
- Site away from the water source in locations where stock shelter.
- Offer in the ratio of one feeding point per 50 sheep.
- Check regularly to measure consumption of Free Access Minerals.

### In-Feed:

- Usually included at 25kg per tonne of finished feed if restricted.
- Can also be top dressed onto forage or bulk feed.

**Please note:** All minerals are available as 'In-Feed' dust free and palatable or 'Free Access' with additional waterproofing for use outdoors.

# Salt Blocks



**A range of specially formulated salt blocks suitable for cattle and sheep all year round. Available in three formulations to suit a variety of applications.**

The blocks provide an easy and controlled method of offering the essential mineral salt. Sodium is an essential mineral necessary for efficient feed utilisation, fluid balance, nutrient absorption and a healthy rumen pH.



## SALT BLOCK GP

**No Copper suitable for sheep.**

Recommended Daily Intakes:  
50 to 100g per head / day for cattle,  
20 to 30g per head / day for sheep.



## SALT BLOCK CATTLE

**Contains Copper, do not feed to sheep.**

Recommended Daily Intakes:  
50 to 100g per head / day for cattle.



## SALT BLOCK CATTLE EXTRA TRACE

**Contains Copper, do not feed to sheep.**

Recommended Daily Intakes:  
50 to 100g per head / day for cattle.

	SALT BLOCK GP	SALT BLOCK CATTLE	SALT BLOCK CATTLE EXTRA TRACE
Calcium %	0.2	0.2	0.2
Phosphorus %	-	0.2	0.2
Magnesium %	-	0.3	0.3
Sodium %	39	38	38
Selenium mg/kg	10	10	20
Cobalt mg/kg	80	80	80
Iodine mg/kg	229	200	300
Manganese mg/kg	76	200	500
Zinc mg/kg	114	300	300
Copper mg/kg	-	400	2,250
Shelf life (months)	24	24	24
Pack size (kgs)	10 x2	10 x2	10 x2
Feeding rate (g/h/d)	< 150	< 150	< 150

## Feeding Guidelines

Ideal for all classes of stock where supplementary salt is required. Offer free-access at a ration of one 10kg block per 50 head of sheep or 30 head of cattle.

## OPTI-BALANCE Mineral Range

**Presentation:** Powdered minerals that are palatable and dust free.

**Pack Size:** 25kg.

**Trace Elements:** Mineral formulations include a full complement of trace elements included at appropriate levels. Chelated elements are incorporated in specific products to increase mineral bioavailability.

**Vitamins:** Mineral formulations include a full complement of vitamins, at appropriate levels to help ensure animal requirements are met.

**Shelf Life:** All products have a minimum of a 12-month shelf life from point of manufacture.

**Quality Control:** All raw materials are assessed for their chemical and physical parameters through a documented quality control plan.

**Manufacture:** All minerals are supplied by a UFAS accredited manufacturer.

