

Ruminant product guide

Precision-formulated feed and mineral supplements

Includes

 **IntelliBond**
a Selo product





RESPONSIBLE MINERALS
ENVIRONMENT • SCIENCE • PERFORMANCE

Responsible Minerals: Precision-formulated feed and mineral supplements

The Trouw Nutrition range of Maxcare feed and mineral supplements have been specially formulated to help meet the latest nutritional requirements of cattle and sheep. Included in the range are a choice of powder minerals, molassed lick buckets, salt blocks, protein concentrates and DCAB products, offering flexibility in a wide range of production systems.

Each individual specification has been specifically formulated by our expert team of ruminant nutritionists, using data from over 18,000 forage mineral analyses carried out by our very own Trouw Nutrition GB Laboratory within the last 5 years. This extensive set of data has been used to help ensure accurate evidence-based recommendations to help balance forages offered in GB for optimal animal health and performance.

Trouw Nutrition GB

Part of the Nutreco Group, Trouw Nutrition GB is a leading authority in the field of animal nutrition.

Customers in GB and in overseas markets benefit from Trouw Nutrition GB’s knowledge and experience in providing innovative nutritional products and technically advanced solutions to meet the increasing demands of the modern agricultural and companion animal nutrition markets.

Quality, innovation and sustainability are the guiding principles behind everything we do – from research and raw material procurement, to the delivery of cutting-edge products and services for agriculture.

Originally established as Frank Wright back in 1870 supplying grain to Derbyshire farmers, the company moved from being privately owned to being acquired by BASF in 1996 and then Nutreco in 2007. Nutreco themselves were acquired by SHV in 2015 and we have continued to go from strength to strength – the benefits of 150 years of experience combined with a company dedicated to “feeding the future”.



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Key:

- Species
- Free-access
- In-feed
- Fish oil
- Packweight



The Responsible Minerals strategy

We know that balancing mineral levels within rations and ensuring requirements are met without oversupply or undersupply is becoming increasingly important from an environment perspective, reducing pollution and waste, as well as from an economic perspective of a farmer.

Responsible mineral nutrition must take into account mineral supply from the total diet and the on-farm situation. The Maxcare range has been specifically formulated to balance a wide range of diets in all situations and is reviewed by our expert team every 6 months to ensure maximal accuracy.

Our Maxcare range aims to address the real physiological requirements of the animal, whilst doing this with the least amount of product possible due to accurate consideration of the most effective mineral sources to supplement for those requirements to be met. There are no high or low levels, only optimum levels for production and growth, which incorporate sources that maximise mineral absorption, minimise destruction of other nutrients (in feed and in the rumen), increase palatability and decrease excretion.

RESPONSIBLE MINERALS

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Responsible Minerals criteria

- Mineral has been checked alongside ration to ensure suitability for the diet
 - Reviewed yearly
- Formulated to minimise environmental impact
 - Maximise trace element absorption
 - Minimise trace element excretion
- Formulated to meet the most up to date animal requirements
- No inclusion of sulphates and oxides
- 100% inclusion of the highest bioavailability sources
- Formulated to maximise rumen health and performance

Unique feed additives

As part of our 'responsible mineral strategy', the Maxcare range includes Trouw Nutrition's unique high quality Selko® feed additives, IntelliBond®, Optimin® and AO-mix R, which offer a number of proven animal health and performance benefits.



IntelliBond hydroxy minerals

Most mineral supplements available on the UK market are formulated with inorganic trace minerals such as copper sulphate, zinc oxide and manganous oxide. Whilst these tend to be the cheapest sources of trace minerals, research has shown sulphates to have negative effects on vitamin stability, rumen function and fibre digestibility, whereas oxides have been shown to have very low bioavailability. Both of these aspects limit optimal animal health and performance.

Manufactured to the highest quality standards in the US with full traceability, IntelliBond hydroxy trace minerals have been developed as a cost-effective

alternative to inorganic trace minerals in cattle and sheep rations. Not only do they help to counteract the negative effects on rumen function associated with feeding inorganic minerals, but they also have high bioavailability helping to deliver more mineral to the animal's bloodstream for optimal health and performance.

Trouw Nutrition's Maxcare range has been formulated without the inclusion of any sulphate and oxide trace minerals, to help minimise any negative effects on feed digestibility and to ensure only the best trace mineral supply to the animal.

How does IntelliBond benefit animal performance?

- Improved feed palatability
 - Animals prefer supplements that contain IntelliBond trace minerals over supplements with sulphate trace minerals.*
- Optimal fibre digestibility
 - Supports the function of the fibre-digesting and other bacteria in the rumen, and subsequent animal performance.
 - Research has shown replacing sulphate trace minerals with IntelliBond hydroxy trace minerals to avoid a reduction in NDF digestibility by up to 3.4 points in dairy and beef cattle diets – every 1 point increase in NDFd is worth 0.25 to 0.3kg of milk.*
- If copper sulphate is such an effective killer in footbaths, think what it does to the rumen bug population
- High relative bioavailability (RBV)
 - Independent university research has shown IntelliBond C and IntelliBond Z to have 1.96 and 2.04 times greater RBV when compared to inorganic sources of copper and zinc respectively.*
 - This helps deliver more trace mineral to the animal's bloodstream to support health and performance whilst minimising the environmental impact of mineral excretion.
- Heathier, more productive animals
 - The unique properties of IntelliBond hydroxy trace minerals help provide a reliable and predictable supply of trace minerals to the animal, to drive optimal health and productivity within all ruminant species.

*For further information on our feed additive research, please contact us via technical.gb@trouwnutrition.com.



Optimin organic minerals

The Optimin organic trace mineral range, which includes copper, zinc, manganese and selenium, offer guaranteed and consistent premium quality and are manufactured to the highest standards in dedicated facilities. Optimin chelates have been demonstrated to have stronger bond strength and greater stability compared to other complexes at various pH's whilst maintaining excellent bioavailability for optimal animal mineral status.



AO-mix R

During periods of high productive stress, such as peak lactation, pre-lambing and pre-calving, oxidative stress may negatively impact on animal performance if not controlled. This may include a physical reduction of feed intakes, productive and reproductive performance, and increased susceptibility to disease and mortality. AO-mix R is a mixture of specially selected polyphenols with a high antioxidant effect and high bioavailability to support the animal's anti-oxidative status, to help ensure performance and health isn't compromised.



LactiBute

Poor gut health can negatively impact cow performance and welfare, and lead to major losses in terms of energy for the cow, leading to financial loss for the farmer. By giving cows the tools to cope with stress, cow performance is enhanced and welfare issues are reduced resulting in a healthier herd. LactiBute is our new patented product which strengthens the intestinal barrier function promoting improved gut health, increased milk yield and increased milk solids production in lactating dairy cows.

By reducing inflammation in the hindgut with LactiBute we make more glucose available to the cow. This improves energy status and allows the cow to deal with stressors much more effectively.



Maxcare powder minerals

Specially formulated range of powder mineral and vitamin supplements ideal for a number of different cattle and sheep production systems. All products are free from sulphate and oxide trace minerals, and include IntelliBond and AO-mix R to help support overall health and performance.

MAXCARE DAIRY

Specially formulated mineral to help balance dairy cow rations consisting of mixed forages, such as grass, maize and wholecrop silages, and mineralised compound, to help support performance throughout lactation.



IntelliBond AO-mix

Recommended feeding rate: up to 250g/head/day

MAXCARE DRY COW

Ideal for in-calf cows and heifers during the last 6 weeks of pregnancy. Contains a low level of calcium and high level of magnesium to help reduce the risk of milk fever and to support calving ease, whilst the inclusion of Optimin SeY, AO-mix R and a high level of vitamin E supports cow performance throughout the stressful transition period, as well as calf health and vigour.



IntelliBond Optimin AO-mix

Recommended feeding rate: 100-150g/head/day

MAXCARE CATTLE

Formulated for breeding cattle as well as growing and finishing animals to help balance a wide range of forage-based diets for optimal health and productivity. The inclusion of IntelliBond Copper specifically helps to support fertility, growth rates and overall health.



IntelliBond AO-mix

Recommended feeding rate: 75-150g/head/day

MAXCARE CATTLE HIGH MAGNESIUM

High magnesium mineral containing IntelliBond Copper, ideal for dairy and suckler cows at risk of grass staggers during the spring and autumn.



IntelliBond AO-mix

Recommended feeding rate: 100-150g/head/day

MAXCARE INTENSIVE BEEF

Formulated to help balance cereal-based rations offered within intensive and semi-intensive beef finishing systems. Contains high levels of calcium and sodium, and no added phosphorus and magnesium to help reduce the risk of urinary calculi (bladder stones).



IntelliBond AO-mix

Recommended feeding rate: 25kg/tonne of finished feed

MAXCARE GUT HEALTH PACK

Specialised booster pack to be used alongside other Maxcare mineralised products. Contains LactiBute to help strengthen the intestinal barrier function promoting improved gut health, increased milk yield and increased milk solids production in lactating dairy cows. Also contains IntelliBond Zinc to support gut integrity.



IntelliBond LactiBute

Recommended feeding rate: 50g/head/day



MAXCARE SHEEP

High specification mineral and vitamin supplement ideal for sheep throughout the year. Especially suitable for feeding to ewes during tupping time and pre-lambing, where the inclusion of Optimin SeY, AO-mix R and a high level of vitamin E helps to support scanning and lambing percentages as well as ewe health and lamb viability. The inclusion of IntelliBond Zinc further helps to support hoof condition where lameness is an issue.



IntelliBond Optimin AO-mix

Recommended feeding rate: 15-30g/head/day

MAXCARE RAM AND INTENSIVE LAMB

Formulated specifically for growing and finishing lambs as well as breeding rams, with added ammonium chloride to help minimise the risk of urinary calculi (bladder stones). High levels of vitamin E and selenium help to support immunity and breeding performance. Vitamin B1 is also included for where cerebrocortical necrosis (CCN) is a risk, whilst vitamin B12 helps to support energy metabolism and subsequent growth rates in lambs under 12 weeks of age.



IntelliBond AO-mix

Recommended feeding rate: 15-30g/head/day

Product specifications

	Dairy	Dry Cow	Cattle	Cattle High Magnesium	Intensive Beef	Gut Health Pack	Sheep	Ram and Intensive Lamb
Calcium %	Bal*	2	Bal*	Bal*	Bal*	-	Bal*	Bal*
Phosphorus %	2	3	2	2	-	-	1	-
Magnesium %	8	18	4	18	-	-	5	-
Sodium %	8	12	10	10	10	-	8	10
Ammonium chloride %	-	-	-	-	-	-	-	10
Selenium	•	•	•	•	•	-	•	•
Optimin SeY	•	•	-	-	-	-	•	-
Cobalt	•	•	•	•	•	-	•	•
Iodine	•	•	•	•	•	-	•	•
Iron	-	-	-	-	-	-	-	•
IntelliBond Manganese	•	•	•	•	•	-	•	•
IntelliBond Zinc	•	•	•	•	•	•	•	•
IntelliBond Copper	•	•	•	•	•	-	-	-
Vitamins A, D3 and E	•	•	•	•	•	-	•	•
AO-mix R	•	•	•	•	•	-	•	•
Vitamin B1	-	-	-	-	-	-	-	•
Vitamin B12	-	-	-	-	-	-	•	•
LactiBute	-	-	-	-	-	•	-	-

*Formulation balanced on limestone.

Maxcare Natureblend powder minerals

Soil Association approved range of free-access powder mineral supplements ideal for cattle and sheep in organic farming systems. All Natureblend minerals contain added seaweed meal as a natural permitted source of essential trace elements.

MAXCARE NATUREBLEND DAIRY

A high specification mineral formulated to help balance forage-based organic dairy rations, including good levels of zinc, selenium and copper.



Recommended feeding rate: 100-150g/head/day

MAXCARE NATUREBLEND DRY COW

Specially formulated mineral supplement for in-calf heifers and cows during the final 6 weeks of pregnancy. Contains a low level of calcium and a high level of magnesium to help reduce the risk of milk fever and to support calving ease.



Recommended feeding rate: 100-150g/head/day

MAXCARE NATUREBLEND HIGH MAGNESIUM

High magnesium mineral with added copper for dairy and suckler cows at risk of grass staggers during the spring and autumn.



Recommended feeding rate: 100-150g/head/day

MAXCARE NATUREBLEND BEEF

Specially formulated to help balance forage-based rations offered to growing beef cattle, containing essential major minerals and trace elements to optimise requirements.



Recommended feeding rate: 100-150g/head/day

MAXCARE NATUREBLEND SHEEP

Ideal for balancing forage-based diets offered to breeding ewes and lambs in extensive systems. Contains a good level of zinc for where there is a risk of lameness.



Recommended feeding rate: 15-30g/head/day



Product specifications

	Natureblend Dairy	Natureblend Dry Cow	Natureblend High Magnesium	Natureblend Beef	Natureblend Sheep
Calcium %	Bal*	1.3	Bal*	Bal*	Bal*
Phosphorus %	2	4	3	2	1
Magnesium %	8	6	20	4	5
Sodium %	8	8	10	10	8
Selenium	•	•	•	•	•
Cobalt	•	•	•	•	•
Iodine	•	•	•	•	•
Manganese Oxide	•	•	•	•	•
IntelliBond Zinc	•	•	•	•	•
IntelliBond Copper	•	•	•	•	-
Seaweed meal	•	•	•	•	•

*Formulation balanced on limestone.



Maxcare molassed lick buckets

A range of palatable molassed lick buckets specially formulated to complement a wide range of forage-based systems all year round. The inclusion of IntelliBond helps to optimise fibre digestion and forage utilisation, whilst offering high bioavailability to help balance trace mineral deficiencies often found in forage-based systems.

Mineral buckets

MAXCARE CATTLE

Formulated for all types of cattle to help balance a wide range of forage-based diets for optimal health and productivity. The inclusion of IntelliBond Copper specifically helps to support fertility, growth rates and overall health.






IntelliBond[®] AO-mix

Typical intake: cattle up to 200g/head/day

MAXCARE CATTLE HIGH MAGNESIUM

Palatable high magnesium lick bucket containing IntelliBond Copper, ideal for dairy and suckler cows at risk of grass staggers during the spring and autumn.



IntelliBond[®] AO-mix

Typical intake: cattle up to 200g/head/day

MAXCARE DRY COW

Ideal for in-calf cows and heifers during the last 6 weeks of pregnancy. Contains a high level of magnesium to help reduce the risk of milk fever and to support calving ease, whilst the inclusion of Optimin SeY, AO-mix R and a high level of vitamin E supports cow performance throughout the stressful transition period, as well as calf health and vigour.



IntelliBond[®] Optimin AO-mix

Typical intake: cattle up to 200g/head/day

MAXCARE SHEEP

Formulated for sheep to support good flock health and performance throughout the year. The inclusion of IntelliBond Zinc specifically helps to support hoof condition where lameness is an issue.



IntelliBond[®] Optimin AO-mix

Typical intake: sheep up to 50g/head/day

MAXCARE GARLIC

Mineral and vitamin lick containing added garlic, ideal for cattle and sheep during the summer to help discourage flies and biting insects. Please consult the product label for specific feeding instructions due to the risk of meat and milk taint.



IntelliBond[®] AO-mix

Typical intake: cattle up to 200g/head/day
sheep up to 50g/head/day



Feed and mineral buckets

MAXCARE HIGH PROTEIN AND ENERGY

Formulated for cattle and sheep, with no added copper, where extra protein and energy is required to support optimal health and performance. Particularly suitable for complementing forages from late summer onwards and throughout the winter. Not suitable for cattle and sheep under 12 weeks of age.



IntelliBond[®] Optimin AO-mix

Typical intake: cattle up to 500g/head/day
sheep up to 100g/head/day

Product specifications

	Cattle	Cattle High Magnesium	Dry Cow	Sheep	Garlic	High Protein & Energy
Crude protein %	-	-	-	-	-	21
Urea %	-	-	-	-	-	4
ME (MJ/kg DM)	-	-	-	-	-	10
Calcium %	Bal*	Bal*	4	Bal*	Bal*	Bal*
Phosphorus %	0.5	-	1	1	0.5	0.5
Magnesium %	3	20	16	5	3	10
Sodium %	7	5	4	7	6	4
Sulphur	-	-	-	-	-	•
Selenium	•	•	•	•	•	•
Optimin SeY	-	-	•	•	-	•
Cobalt	•	•	•	•	•	•
Iodine	•	•	•	•	•	•
IntelliBond Manganese	•	•	•	•	•	•
IntelliBond Zinc	•	•	•	•	•	•
IntelliBond Copper	•	•	•	-	-	-
Vitamins A, D3 and E	•	•	•	•	•	•
AO-mix R	•	•	•	•	•	•
Vitamin B1	-	-	-	-	-	•
Vitamin B12	-	-	-	•	•	•
Fish oil	-	-	-	-	-	•

*Formulation balanced on limestone.

Maxcare salt blocks

Specially formulated range of fully weatherproofed free-access salt blocks, suitable for cattle and sheep all year round.

MAXCARE UNIVERSAL

Trace element salt block ideal for all livestock, including horses, to supplement forage-based systems and support health and performance.



IntelliBond

Typical intake: cattle 50-70g/head/day
sheep 10-15g/head/day
goats 15-20g/head/day
horses up to 75g/head/day

MAXCARE CATTLE

Trace element salt block with added IntelliBond Copper, ideal for all types of cattle on forage-based systems.



IntelliBond

Typical intake: cattle 50-70g/head/day

Product specifications

	Universal	Cattle	General Purpose
Sodium %	38.5	38.5	38.5
Selenium	•	•	•
Cobalt	•	•	-
Iodine	•	•	•
IntelliBond Manganese	•	•	•
IntelliBond Zinc	•	•	•
IntelliBond Copper	-	•	-

MAXCARE GENERAL PURPOSE

Basic trace element salt block ideal for all livestock, including pigs, to supplement a range of diets in extensive based systems and support animal health and performance.



IntelliBond

Typical intake: cattle 50-100g/head/day
sheep 10-15g/head/day
pigs 25g/head/day

Maxcare protein concentrates

A range of mineralised high protein concentrates for cattle and sheep, containing IntelliBond trace minerals and AO-mix R, ideal for mixing with home-grown cereals and for balancing forages.

MAXCARE BEEF 50

High protein, urea-based concentrate ideal for growing and finishing beef cattle over 12 weeks of age. Suitable for mixing with home-grown cereals to help achieve a target protein concentration in the overall ration.



IntelliBond AO-mix

Inclusion rate: we recommend that advice is sought after from a ruminant nutritionist

MAXCARE BEEF 75

Extra high protein, urea-based concentrate ideal for growing and finishing beef cattle over 12 weeks of age. Suitable for mixing with home-grown cereals to help achieve a higher protein concentration in the overall ration.



IntelliBond AO-mix

Inclusion rate: we recommend that advice is sought after from a ruminant nutritionist

MAXCARE BEEF 50 + LEVUCCELL SC

High protein, urea-based concentrate ideal for growing and finishing beef cattle over 12 weeks of age. Suitable for mixing with home-grown cereals to help achieve a target protein concentration in the overall ration. Contains Levucell SC rumen specific live yeast with patented TITAN protection technology to help optimise rumen pH and improve feed efficiency.



IntelliBond AO-mix

Inclusion rate: we recommend that advice is sought after from a ruminant nutritionist

MAXCARE CATTLE AND SHEEP 50

High protein concentrate, containing urea and natural protein sources including soyabean meal, ideal for cattle and sheep over 12 weeks of age. The inclusion of soyabean meal helps provide by-pass protein to support lean frame development in growing animals, whilst the inclusion of urea helps support overall ration digestion.



IntelliBond AO-mix

Inclusion rate: we recommend that advice is sought after from a ruminant nutritionist

Product specifications

	Beef 50	Beef 50 + Levucell SC	Beef 75	Cattle and Sheep 50
Crude protein %	50	50	75	50
Urea %	15	15	25	10
Oil %	5.9	5.9	5.1	6.2
Calcium %	Bal*	Bal*	Bal*	Bal*
Phosphorus %	-	-	-	0.4
Magnesium %	-	-	-	0.2
Sodium %	5	5	7.5	2.5
Selenium	•	•	•	•
Cobalt	•	•	•	•
Iodine	•	•	•	•
IntelliBond Manganese	•	•	•	•
IntelliBond Zinc	•	•	•	•
IntelliBond Copper	•	•	•	•
Vitamins A, D3 and E	•	•	•	•
AO-mix R	•	•	•	•

*Formulation balanced on limestone.



Maxcare DCAB products

Specialist range of mineral and vitamin supplements containing anionic salts, designed to help optimise dietary cation-anion balance during the transition period and to help minimise the incidence of milk fever. Also formulated to include IntelliBond and Optimin trace minerals, and AO-mix R for optimal transition health and performance. To ensure the desired DCAB is achieved on individual farms, we recommend that advice is sought after from a ruminant nutritionist.

MAXCARE CAB CORRECTOR EXTRA

High specification supplement containing a range of feed additives to support cow performance and health throughout the stressful transition period. The addition of protected methionine helps to support milk production during early lactation and a reduction in metabolic disorders such as fatty liver disease, plus propylene glycol to help minimise the risk of ketosis.



25
kg

IntelliBond Optimin AO-mix

Product specifications

	Cab Corrector Extra
Calcium %	Bal*
Phosphorus %	1.8
Magnesium %	3
Sodium %	0.7
Selenium	•
Optimin SeY	•
Cobalt	•
Iodine	•
IntelliBond Manganese	•
IntelliBond Zinc	•
Optimin Zinc	•
IntelliBond Copper	•
Optimin Copper	•
Vitamins A, D3 and E	•
AO-mix R	•
Biotin	•
Levucell SC yeast	•
Essential oils	•
Protected methionine	•
Propylene glycol	•

*Formulation balanced on limestone.



Maxcare®, IntelliBond®, Selko® and Optimin® are brands of Trouw Nutrition, a Nutreco company.

Trouw Nutrition is a global leader in innovative feed specialities, premixes and technical services for animal nutrition. Quality, innovation and sustainability are the guiding principles behind everything we do – from research and raw material procurement, to the delivery of cutting-edge products and services for agriculture.

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