Maxammon Grain
Rolled Grain
Fertiliser
Maize Silage
Straw
Mineral Range
Silage additives
Straight Feeds
About Maxammon Grain
Maxammon grain is the name given to an exceptionally cost effective and efficient system of grain storage and preservation, where enhanced pH and increased protein result in huge benefits to the farmer. This is what is referred to as the 4P’s – Preservation, pH, Protein & Price.
For non grain growers we supply ready to feed Maxammon barley, wheat, maize and oats

Key benefits of Maxammon Grain
- Higher levels of grain may be utilised in all ruminant diets
- Lower final feed cost than other methods of grain storage and treatment
- Increases protein levels to 14% - 16% crude protein
- Alkaline pH provides a buffer to improve rumen function
- Improved animal performance
- Better profitability and improved animal health
- Less foot and lameness problems in dairy cows and beef cattle
- Improved body condition stability and fertility in cows
- Finishing animals introduced faster onto full feed at housing with risk of acidosis
- Significantly reduces dependence on bought in protein sources

*p. did you know…..Maxammon is a combination of soluble feed grade urea, essential oils, enzymes and full fat soya. The unique patented enzyme ensures 100% hydrolization of the urea content during the preservation process, rapidly stabilising the grain

pH effect
Maxammon alkaline treated grains are left with a high pH which counter acts acidity in the rumen after feed-out. Eventually further reaction with water occurs leaving behind ammonium salts, mainly ammonium bicarbonate. This powerful buffering action supports and enhances the natural buffer, sodium bicarbonate, which is contained in a ruminant’s saliva. These buffers are essential to combat fermentation acids which can make the rumen too acidic. Feeding alkaline preserved feeds presents the rumen microbes with vital fermentable energy and RDP (rumen degradable protein) which are the two critical components for optimizing rumen performance and feed intake. Optimum rumen pH for thorough digestion is 6.2. most conserved forages in Ireland have a pH of between 3.7 and 4.3 all of which add considerable acid loads to the diet. The addition of Maxammon grain (with a pH of 8.5 to 9.5) rapidly increases the pH in the diet helping to attain an optimum rumen environment resulting in better feed digestion and efficiency.

Safe feeding of high starch cereals
Due to the fact that the mature grain is not rolled very fine during the Maxammon grain process the release of starch is slower in the rumen than conventionally rolled cereals. Coupled with the alkaline preservation this results in a feed that while high in starch is very rumen friendly and is why larger volumes of Maxammon grain can be fed than traditional forms of cereals.
Maxammon grain also has a higher starch level than moist crimped grain as immature grains have lower starch levels as sugars have yet to be converted into starch. Coupled with this factor is the issue that moist crimped grain is harder to conserve and requires precise clamp management to avoid significant losses at feed-out and digestive upsets which may occur due to the associated spoilage.

In addition to Maxammon treated cereals we also offer a range of rolled cereals and straight energy, protein and fibre feeds:
- Barley
- Wheat
- Oats
- Maize
- Soya hulls
- Beet pulp
- Distillers
- Feed grade urea
We offer a range of rolled cereals and straight energy, protein and fibre feeds:

- Barley
- Soya hulls
- Soya
- Maize Silage
- Wheat
- Beet pulp
- Oats
- Distillers
- Maize
- Distillers
- Whole Crop
- Straw
- Maize Silage
- Maize Gluten

New Generation Silage Innoculants

Protect and enhance the feeding value of your silage using Micron silage inoculants. Reduce feed losses and achieve greater energy from grass, maize and whole crop silages. Get more milk and meat out of your silage this season.

Silo-max Grass
Silmomax Grass contains lactic acid bacteria for fermentation control, a specific stabilising lactic bacterium for enhanced aerobic stability, specific enzymes for improved fibre digestibility in grass species together with microbial nutrients and microbial stimulants to ensure rapid activation and effectiveness following rehydration in water. Silomax Grass has been designed to achieve maximum effect in grass crops used for silage. Silo-max treated silages deliver 0.45MJ/kg more metabolisable energy than untreated/non-Silo-max treated grass silages.* Available in granular (25kg) and liquid (150g)

Silo-max Maize
Silmomax Maize contains lactic acid bacteria for fermentation control, a specific stabilising lactic bacterium for enhanced aerobic stability, specific enzymes for improved fibre digestibility in maize. It contains lactobacillus brevis, which produces acetic acid to retard the growth of spoilage yeasts and moulds, increasing stability and reducing losses at pit face. Silo-max Maize has been specifically designed to achieve maximum effect in maize crops under European conditions. Available in granular (25kg) and liquid (150g)

Silo-max Whole Crop
Silmomax Whole Crop has been specifically designed for whole crop usage, including barley, wheat and oats. Available in liquid (150g). Each 150g jar is sufficient to treat 50 tonnes of fresh forage crop. All Silo-Max product formulations contain: Pediococcus pentosaceus, Lactobacillus plantarum and Lactobacillus brevis; Xylanase, Mannanase and Cellulase; Carriers: dextrose, manganese sulphate and silicon dioxide.

ProFresh Plus
A dry granular buffered form of propionic acid used to inhibit the growth of spoilage yeasts and moulds which grow on silage, processed feeds and total mixed rations thereby removing valuable feed ingredients and spoiling sources of forage and grains. Scatter over edges of pit to prevent spoilage or add to a TMR to reduce heating. Available in 25kg

*did you know……we also offer forward contracts for purchasing feed”
**Sulphur:**

The importance of sulphur as a nutrient for crops is well documented. It is linked to:

- The building block of protein helping to improve growth & development
- Improves nitrogen use efficiency
- Reduces nitrate leaching
- Essential for N fixation by legumes
- Essential for the synthesis of the essential amino acids, methionine & cysteine
- Essential for the synthesis of chlorophyll
- Increases sugar content
- Improves dry matter digestibility

**Nitrogen:**

The major nutrient nitrogen is required in the greatest quantity by many crops including grass. It is the key to achieving high dry matter yields of the correct quality and is a component of all proteins and chlorophyll, which drives photosynthesis; the conversion of light energy, water and carbon dioxide to sugar. The key to achieving the optimum return is to apply the correct amount of nitrogen, from the right source, at the right time. The amount of plant available nitrogen is determined by the Nitrogen Cycle which involves very complex soil processes and calculating the correct rate to apply can be difficult. However, a series of Yara trials over a number of years concluded that the typical requirement of nitrogen to optimize grass yield and quality could be described by ‘The Grassland Rule’ of: 2 units N/acre/day (2.5kg N/ha/day). Nitrogen from organic manures should be deducted from the requirement before mineral nitrogen recommendations are calculated.

**Phosphorus:**

Phosphorus plays a major role in the energy supply for many plant metabolic processes, and enzyme activity, forming the central part of the energy bonds in ATP. This energy is needed for the active uptake and internal redistribution of other nutrients, making phosphorus availability essential. Phosphorus is very immobile in the soil and transient deficiencies can show up in early spring when soils are cold and wet. Trials have shown that spring applied phosphate improves the response to applied nitrogen. Phosphorus excreted by livestock is all in the dung. After 2 years of intensive grazing, only 16% of the pasture surface will be affected by dung. Consequently, there is little difference in fertilizer phosphorus requirement between cut and grazed swards.

**Potassium:**

Potassium is vital for regulating water supply and cell turgidity and, like nitrogen, is taken up in large quantities during the rapid growth phases in the spring and early summer. An adequate supply is essential for maximising yields from applied nitrogen. Grass management (i.e. grazing or cutting) will affect the rate of potassium required. Potassium excreted by livestock is mostly water-soluble and in the urine. Recycling of potassium must be taken into account and fertilizer recommendations will subsequently differ between cut and grazed swards.

**Yara Complex Compound Fertilisers grades provide:**

- Accurate spreading to maximize yield and return
- Even distribution pattern over 24 meters
- Source: Amazone Independent Tests/ Silsoe Research Int 1999
- Consistent particle size (90% 2mm – 4mm)
- Free flowing and dust free
- Correct nutrient balance in every particle
Alongside a cost effective range of products, Devenish Nutrition offer our customers tailored nutritional services and technical service support.

**Maxammon Mineral Range**
The Maxammon range of minerals has been designed to provide the optimum requirements for your dairy, dry cows and beef cattle when fed Maxammon treated grain. The range of minerals has a number of key ingredients including Active-S, Cu-Tek, Sel-Plex and MAAC Chelates, with the option of VéO and Yea-Sacc. These minerals have been formulated to a high level to meet the requirements of modern livestock.

**Key Ingredients**

**Active-S**
An adequate level of sulphur is essential to ensure active fibre digestion in the rumen. In addition, it is a key component in the reaction to bind high molybdenum levels in forage, a common reason for infertility. Active-S boosts rumen function by providing biologically active sulphur.

**Cu-Tek**
Cu-Tek incorporates 5 different copper sources rather than one, to achieve a highly effective way of boosting copper absorption and reducing the amount tied up by the antagonists. This helps to alleviate problems with fertility associated with excess levels of molybdenum.

**Sel-Plex**
Increases the availability of selenium and dramatically lifts the blood selenium levels. Sel-Plex is one of the biggest breakthroughs for dairy, suckler cows and sheep in recent years.

**MAAC Chelates**
Novus MAAC (Metal Amino Acid Chelates) are highly available nutritional sources of minerals and trace elements in which the element is ‘protected’ from adverse interactions in the digestive tract by being bonded to glycine; a naturally occurring amino acid. MAAC chelates are better absorbed and utilised than mineral salts and have a proven track record in improving health, fertility and production in farm livestock.

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**Harbro** are the leading supplier of mineral and vitamin supplements in Scotland and are one of the largest independent suppliers in the UK. All of Harbro’s supplements are backed by professional sales and technical support service covering all aspects of production. Harbro’s innovative and progressive approach ensures not only do you receive a high quality supplement, but that you will benefit from the most up-to-date nutritional breakthroughs as they become available.

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**Devenish Nutrition** are the leading edge agri-technology company, dedicated to the research, development and manufacturing of quality premixes, pre-starters, starters and concentrates together with speciality products for the intensive livestock sector.
BEEF CATTLE

Maxammon Beef 1-3
Designed for feeding to fattening cattle being fed 1-3kg of Maxammon treated grain. Formulated to maximise the utilisation of increased protein in Maxammon treated grain.

Maxammon Beef 3+ Hi Phos
Designed for feeding to fattening cattle being fed 3kg or more of Maxammon treated grain. It is also ideal for feeding where root crops are a significant part of the animal's diet. The high level of phosphorus helps to compensate for low levels of phosphorus in cereals and root crops.

Maxammon Grower
The ideal supplement for feeding to young fast growing store cattle. It is designed to help maximise frame development in growing cattle.

Maxammon dry cow
A dry cow product to be supplied at 125g/ head/ day supplies excellent levels of the vitamins, trace elements and major elements required by in calf heifers and dry cows.

DAIRY COWS

Maxammon Dairy 1-3
Designed to be fed to lactating dairy cows being fed up to 3kg/ head/ day Maxammon grain. The mineral is fully fortified with all the key elements and vitamins at high levels and is designed for feeding at between 150-250g/ head/ day.

Maxammon Dairy 3+ Hi Phos
Designed to be fed at 333g/ head/ day to balance whole crop and/or maize silage inclusion. Contains very high levels of vitamins, in particular Vitamin E. This is a balancer premix and is therefore designed to balance different combinations of forages and high levels of Maxammon grain.

Maxammon Dairy 4+
Formulated to be fed at feeding levels up to 250g/ head/ day. The higher feeding level is necessary to balance the high feeding level of cereals. This is an extremely well balanced mineral supplying high levels of phosphorus which are required for energy utilisation by the animal. It contains an excellent package of vitamins and supplies 1000mg Vitamin E when fed at the recommended rate.

Maxammon Dry Cow Straw
Contains 5% phosphorus which provides 7.5g/ head/ day when fed at the recommended level of 150g/ head/ day. High levels of magnesium to help balance Irish forages. The product supplies 1500mg/ head/ day of Vitamin E which is a renowned immune booster.

*All minerals contain fortified levels of trace elements that help sustain the immune status of the animal in the face of disease challenges associated with housing and other sources of stress.