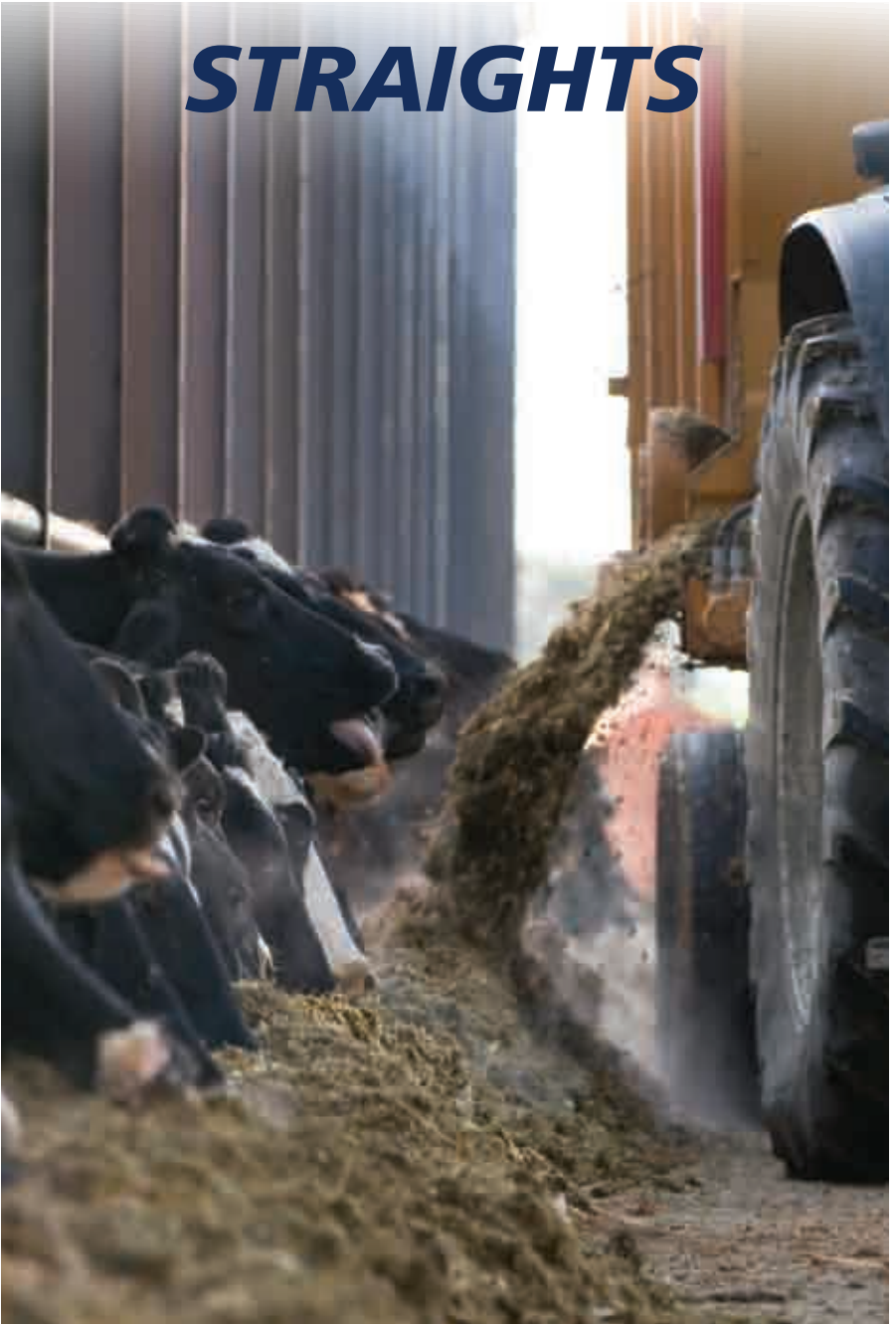


# ***STRAIGHTS***

STRAIGHTS



## STRAIGHTS

Modern TMR and mixer wagon-based feeding systems allow a wide range of feed ingredients to be cost-effectively included in ruminant diets. The use of straights and moist feeds can complement home produced forages. To achieve the best balance of ingredients and secure a continuous supply of straights and moist feeds at competitive prices our trading teams monitor market movements daily.

The NWF Agriculture Market Data page is refreshed from the latest market information every 15 minutes, providing you up-to-date live prices.

The Market Data page illustrates movements on a daily basis. For more information on our live market data page, visit the NWF Agriculture website, or alternatively speak to our commodities team on 0800 756 2787 to help make your raw materials as cost-effective as possible.



## HIPRO SOYA EXT 49

An extremely high protein feed providing energy with a balanced amino acid profile. Soya beans when crushed produce three main products; oil, meal and hulls. The remainder is then heated and flaked.

### Nutritional Benefit

Soya bean meal is probably the best quality vegetable protein source widely used around the world. High in protein and energy with a good amino acid profile, being high in lysine, although methionine is low. High in phosphorus of which 50% is available. HiPro Soya does not have the hulls re-blended in and therefore, lower in fibre, but higher in protein. A source of B and D vitamins.

### Features

- An excellent source of high-quality protein.
- Wide range of uses for many classes of livestock.

### Typical Analysis

• <i>Dry Matter – 90.0%</i>	• <i>Sugars – 90.0%</i>
• <i>Crude Protein – 55.0%</i>	• <i>NDF – 55.0%</i>
• <i>MER 13.6 MJ/Kg</i>	• <i>Oil AH – 2.6%</i>
• <i>Starch – 5.0%</i>	

### Daily feed rates (per head basis)

<i>Milking Cows</i>	<i>Up to 4 (typically 2)kg</i>
<i>Dry Cows</i>	<i>Up to 2kg</i>
<i>Replacement Heifers</i>	<i>Up to 2kg and up to 30% of the DMI</i>
<i>Calves (to 12 weeks)</i>	<i>Up to 0.75kg and up to 20% of the DMI</i>
<i>Growing Cattle</i>	<i>Up to 1.5kg and up to 30% of the DMI</i>
<i>Finishing Cattle</i>	<i>Up to 2kg and up to 35% of the DMI</i>
<i>Suckler Cows</i>	<i>Up to 2 (typically 1)kg</i>
<i>Ewes and Rams</i>	<i>Up to 0.75 (typically 0.25)kg</i>
<i>Hoggets and Lambs</i>	<i>Up to 0.75kg and up to 30% of the DMI</i>

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# MAIZE DISTILLERS

A by-product of either grain whisky production (often for gin or vodka manufacturing) or ethanol production. Maize is soaked to release the starch reserves for fermentation. The grain which remains after the liquor is removed is often called wet draff.

## Nutritional Benefit

High in fibre, but well digested by ruminants. A high-energy, mid-protein feed which is reasonably undegradable in the rumen. It is low in starch because of its extraction but, has the highest energy value of all distillers' grains, being higher in oil content than other distillers grains.

## Features

- Very palatable feed.
- High-quality protein and a source of bypass protein.
- High proportion of the energy as digestible fibre and oil.

## Typical Analysis

• Dry Matter – 90.0%	• Sugars – 5.5%
• Crude protein – 28.0%	• NDF – 44.5%
• MER 14.8 MJ/Kg	• Oil AH – 12.0%
• Starch – 4.5%	

## Daily feed rates (per head basis)

Milking Cows	Up to 4 (typically 3)kg
Dry Cows	Up to 2kg
Replacement Heifers	Up to 3kg and up to 35% of the DMI
Calves (to 12 weeks)	Up to 1.5kg and up to 25% of the DMI
Growing Cattle	Up to 2.5kg and up to 40% of the DMI
Finishing Cattle	Up to 5kg and up to 40% of the DMI
Suckler Cows	Up to 3 (typically 2)kg
Ewes and Rams	Up to 1 (typically 0.5)kg
Hoggets and Lambs	Up to 0.75kg and up to 50% of the DMI

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# MAIZE GERM

A high energy, very digestible and palatable feed providing a good source of 'slowly fermentable' starch. These are the dried germs from maize after the oil has been extracted. Maize germ is a by-product from either the wet milling of maize, produced after the initial grinding and separation, or from the production of corn.

The oil is either expelled or extracted leaving variable levels depending on the source as such, always check the source and oil content.

## Nutritional Benefit

High in starch, energy and protein with good amino acid balance. The oil is free, unsaturated and could be detrimental to rumen function if not formulated correctly. The low calcium content makes it suitable for dry cows.

## Features

- High starch & energy content.
- High levels of digestible 'slow release' starch.

## Typical Analysis

• Dry Matter – 88.0%	• Sugars – 7%
• Crude protein – 26.0%	• NDF – 4.5%
• MER 14.3 MJ/Kg	• Oil AH – 36.5%
• Starch – 23.0%	

## Daily feed rates (per head basis)

Milking Cows	Up to 5 (typically 3)kg with other feeds
Dry Cows	Up to 2kg (typically 1)kg
Replacement Heifers	Up to 2kg and up to 30% of the DMI
Calves (to 12 weeks)	Up to 1.5kg and up to 25% of the DMI
Growing Cattle	Up to 3kg and up to 40% of the DMI
Finishing Cattle	Up to 5kg and up to 50% of the DMI
Suckler Cows	Up to 3 (typically 1)kg
Ewes and Rams	Up to 1 (typically 0.5)kg
Hoggets and Lambs	Up to 1.5kg and up to 50% of the DMI

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# MAIZE GLUTEN

A feed with a balanced composition of protein, starch and digestible fibre. This makes it an ideal complement in ruminant rations. Derived from the wet milling of maize to extract starch or for alcohol/ethanol production, this feed consists of maize fibre and corn steep liquor, dried and pelleted. The product is manufactured in the USA and is an excellent alternative to domestically produced wheat gluten.

## Nutritional Benefit

As a protein feed with reasonable energy, maize gluten suits many rations and is of good digestibility. The protein quality means it is of less use for pigs and poultry. Although it has reasonable fibre levels, due to milling, it is quite short in length and quickly fermented.

## Features

- Balanced nutrient composition.
- Ready to use pellet / meal.
- Reasonable pellet durability.

## Typical Analysis

• Dry Matter – 88.0%	• Sugars – 3.5%
• Crude protein – 21.5%	• NDF – 42.5%
• MER 12.9 MJ/Kg	• Oil AH – 4%
• Starch – 223.0%	

## Daily feed rates (per head basis)

Milking Cows	Up to 6 (typically 3)kg
Dry Cows	Up to 2kg
Replacement Heifers	Up to 4kg and up to 35% of the DMI
Calves (to 12 weeks)	Up to 1.5kg and up to 25% of the DMI
Growing Cattle	Up to 2.5kg and up to 40% of the DMI
Finishing Cattle	Up to 5kg and up to 40% of the DMI
Suckler Cows	Up to 4 (typically 2)kg
Ewes and Rams	Up to 1 (typically 0.5)kg
Hoggets and Lambs	Up to 0.75kg and up to 50% of the DMI

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## MALT RESIDUAL PELLETS

A well-balanced medium energy and protein feed, providing a lot of digestible fibre and good pellet quality. Malt residual pellets are a co-product from the malting industry. After screening, larger grains of malting barley are encouraged to sprout in order to convert the starch in the grain into sugars. The process is stopped and the sprouts or rootlets (malt culms) removed and dried. Malt residual pellets are formed from a pelleted combination of the malt culms and barley screenings.

### Nutritional Benefit

Average energy can be used as a lower cost filler which has a reasonable source of protein.

### Features

- A good source of digestible fibre.
- High digestible fibre and lower starch content.
- Balanced nutrient composition.
- Consistent and durable pellet.

### Typical Analysis

• Dry Matter – 90.0%	• Sugars – 0.4%
• Crude protein – 24.5%	• NDF – 51.2%
• MER 11.2 MJ/Kg	• Oil AH – 2.5%
• Starch – 16.1%	

### Daily feed rates (per head basis)

Milking Cows	Up to 3 (typically 2)kg
Dry Cows	Up to 2kg
Replacement Heifers	Up to 2kg and up to 30% of the DMI
Calves (to 12 weeks)	Up to 0.75kg and up to 20% of the DMI
Growing Cattle	Up to 3kg and up to 30% of the DMI
Finishing Cattle	Up to 4kg and up to 35% of the DMI
Suckler Cows	Up to 3 (typically 2)kg
Ewes and Rams	Up to 0.75 (typically 0.5)kg
Hoggets and Lambs	Up to 0.75kg and up to 30% of the DMI

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# OATFEED

Oats are widely used in porridge and other breakfast cereals. Oatfeed is produced as a by-product of processing porridge and consists of a mixture of hulls and meal remaining from the screening and dehulling process.

## Nutritional Benefit

A feed of low nutritive value but well suited to ruminant feed. It has a high level of neutral detergent fibre (NDF) and a variable composition which is dependent on the levels of included hulls, flour and screen dust.

Oatfeed needs careful mineral supplementation.

## Features

- A source of digestible fibre.
- Low starch and high digestible fibre.

## Typical Analysis

• Dry Matter – 89.0%	• Sugars – 2.0%
• Crude protein – 5.0%	• NDF – 2.0%
• MER 6.0 MJ/Kg	• Oil AH – 79.0%
• Starch – 7.5%	

## Daily feed rates (per head basis)

Milking Cows	Up to 4 (typically 1)kg
Dry Cows	Up to 3kg
Replacement Heifers	Up to 3kg and up to 35% of the DMI
Calves (to 12 weeks)	Up to 1kg and up to 25% of the DMI
Growing Cattle	Up to 3kg and up to 35% of the DMI
Finishing Cattle	Up to 4kg and up to 40% of the DMI
Suckler Cows	Up to 4 (typically 1)kg
Ewes and Rams	Up to 1 (typically 0.25)kg
Hoggets and Lambs	Up to 1kg and up to 35% of the DMI

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## PALM KERNEL EXPELLER

A good source of energy as digestible fibre and palm oil. A by-product of the palm oil manufacturing process. Obtained by the expelling of palm kernels from which the hard shell has been removed.

### Nutritional Benefit

A source of protein and energy with a high fibre level; It will contain some palm oil which is a hard oil, producing a carcass fat. It is not suitable for use on its own but it is often mixed with molasses to encourage intake. High inclusion levels can help to boost butterfat levels.

### Features

- Very high oil, rich in palmitic acid.
- A rich source of digestible fibre.
- Good supply of non-starch digestible fibre energy.

### Typical Analysis

• Dry Matter – 89.0%	• Sugars – 0.4%
• Crude protein – 18.0%	• NDF – 51.2%
• MER 12.8 MJ/Kg	• Oil AH – 2.5%
• Starch – 1.75 %	

### Daily feed rates (per head basis)

Milking Cows	Up to 2 (typically 1)kg
Dry Cows	Up to 1kg
Replacement Heifers	Up to 2kg and up to 20% of the DMI
Calves (to 12 weeks)	Up to 0.5kg and up to 7.5% of the DMI
Growing Cattle	Up to 2kg and up to 25% of the DMI
Finishing Cattle	Up to 3kg and up to 35% of the DMI
Suckler Cows	Up to 2 (typically 1)kg
Ewes and Rams	Up to 0.5 (typically 0.25)kg
Hoggets and Lambs	Up to 0.5kg and up to 25% of the DMI

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## RAPESEED MEAL (Expelled)

Rapeseed meal is a high energy, hot pressed rapeseed expeller supplying significantly higher energy and post rumen protein digestibility than rape seed meal, extract due to higher retained rumen friendly oil and avoidance of the heat used in the recovery of hexane used in extracted meals.

### Nutritional Benefits

Allows for performance to be maintained whilst reducing the overall protein needs; saving feed costs. Ruminants will increase their intake to provide energy to match the additional supply of amino acids in rapeseed expeller.

### Features

- Higher energy & amino acid digestibility than rapeseed meal extract.
- Dry and free-flowing meal, suitable for wide range of uses for many livestock, providing a source of high quality protein, superior to soya and matched amino acid profile.

### Typical Analysis

• <i>Dry Matter</i> – 89.0%	• <i>Sugars</i> – 7.9%
• <i>Crude protein</i> – 35.4%	• <i>NDF</i> – 35.0%
• <i>MER</i> 13.2 MJ/Kg	• <i>Oil AH</i> – 10.4%
• <i>Starch</i> – 6.9 %	

### Daily feed rates (per head basis)

<i>Milking Cows</i>	<i>Up to 4 (typically 2)kg</i>
<i>Dry Cows</i>	<i>Up to 2kg</i>
<i>Replacement Heifers</i>	<i>Up to 2kg and up to 25% of the DMI</i>
<i>Calves (to 12 weeks)</i>	<i>Up to 0.75kg and up to 20% of the DMI</i>
<i>Growing Cattle</i>	<i>Up to 2kg and up to 25% of the DMI</i>
<i>Finishing Cattle</i>	<i>Up to 3kg and up to 30% of the DMI</i>
<i>Suckler Cows</i>	<i>Up to 2 (typically 0.25)kg</i>
<i>Ewes and Rams</i>	<i>Up to 0.5 (typically 0.25)kg</i>
<i>Hoggets and Lambs</i>	<i>Up to 0.25kg and up to 50% of the DMI</i>

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## RAPESEED MEAL (Extracted)

A good source of rumen degradable protein as well as rumen bypass protein with an amino acid profile beneficially similar to microbial and milk protein.

### Nutritional Benefit

A high protein, good energy feed used to partially replace soya bean meal, although the protein is less digestible. The meal from industrial crops is usually high in glucosinolate/erucic acid.

### Features

- Approximately 2/3 of Rapeseed Meal protein is rumen degradable.
- A good source of high-quality protein.
- Wide range of uses for many classes of livestock.
- We use this product to produce Ultra Pro-R due to its consistent physical quality, the proximity of the production sites and its amino acid profile.

### Typical Analysis

• <i>Dry Matter</i> – 88.0%	• <i>Sugars</i> – 5.0%
• <i>Crude protein</i> – 38.5%	• <i>NDF</i> – 9.5%
• <i>MER 12.1 MJ/Kg</i>	• <i>Oil AH</i> – 36.5%
• <i>Starch</i> – 5.0 %	

### Daily feed rates (per head basis)

<i>Milking Cows</i>	<i>Up to 4 (typically 2)kg</i>
<i>Dry Cows</i>	<i>Up to 2kg</i>
<i>Replacement Heifers</i>	<i>Up to 2kg and up to 30% of the DMI</i>
<i>Calves (to 12 weeks)</i>	<i>Up to 0.75kg and up to 20% of the DMI</i>
<i>Growing Cattle</i>	<i>Up to 1.5kg and up to 30% of the DMI</i>
<i>Finishing Cattle</i>	<i>Up to 2kg and up to 35% of the DMI</i>
<i>Suckler Cows</i>	<i>Up to 2 (typically 1)kg</i>
<i>Ewes and Rams</i>	<i>Up to 0.5 (typically 0.25)kg</i>
<i>Hoggets and Lambs</i>	<i>Up to 0.5kg and up to 30% of the DMI</i>

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# SOYA HULLS

Extremely rich in digestible fibre, Soya Hulls are excellent for maintaining rumen conditions and an ideal substitute for sugar beet feeds, when the price ratio encourages this. Soya beans are normally dehulled prior to crushing and the resulting hulls are either sold as a meal or pelleted.

## Nutritional Benefit

A good source of digestible fibre, with average protein and reasonable energy levels.

## Features

- A rich source of digestible fibre.
- Good levels of non-starch digestible fibre energy.
- Extremely high content of digestible fibre.

## Typical Analysis

• Dry Matter – 90.0%	• Sugars – 5.0%
• Crude protein – 11.6%	• NDF – 9.0%
• MER 11.9 MJ/Kg	• NDF – 67.5%
• Starch – 5.0 %	• Oil AH – 2.4%

## Daily feed rates (per head basis)

Dry Cows	Up to 2kg
Replacement Heifers	Up to 2kg and up to 40% of the DMI
Calves (to 12 weeks)	Up to 1kg and up to 40% of the DMI
Growing Cattle	Up to 2.5kg and up to 40% of the DMI
Finishing Cattle	Up to 5kg and up to 50% of the DMI
Suckler Cows	Up to 4 (typically 2)kg
Ewes and Rams	Up to 1 (typically 0.5)kg
Hoggets and Lambs	Up to 1kg and up to 50% of the DMI

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## SUNFLOWER 32/29

Though it contains less protein and much more fibre than soybean meal, Sunflower 32/29 is a valuable livestock feed, particularly for ruminants and under certain conditions, for pigs and poultry. Well suited to ruminant rations within which it can help reduce acidosis by its fibre contribution. Sunflower 32/29 is a by-product of the oil manufacturing process obtained through the expelling and extraction of seeds of the sunflower.

### Nutritional Benefit

Sunflower 32/29 has good protein levels and is high in fibre. Available in specific blends.

### Features

- High levels of digestible protein.
- Good fibre content.
- Good energy levels.
- Good compliment to low protein feeds.
- Beneficial amino acid profile.

### Typical Analysis

• Dry Matter – 88.0%	• Starch – 1.5%
• Crude protein – 36.0%/32.0%	• Sugars – 6.0%
• MER 9.5 MJ/Kg	• NDF – 47%
• Starch – 27.5 %	• Oil AH – 2.5%

### Daily feed rates (per head basis)

Milking Cows	Up to 4 (typically 2)kg
Dry Cows	Up to 2kg
Growing Cattle	Up to 30% of the DMI
Ewes and Rams	Up to 10% of the DMI
Hoggets and Lambs	Up to 10% of the DMI

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# WHEAT DISTILLERS

A very palatable, high energy and protein feed, rich in digestible fibre, low in starch and providing a good source of bypass protein. Wheat Distillers are a product of the bioethanol industry. Following the fermentation of wheat and the distillation of ethanol, they are obtained from drying solid residues of fermented grains and adding evaporated syrups.

## Nutritional Benefit

High in energy and protein, which is partly degradable, can be used alongside our protected proteins to replace soya when the price ratio encourages it.

## Features

- Highly palatable feed.
- High quality protein and a good source of bypass protein.
- Distillery products contain high levels of yeast fragments particularly in the soluble fraction.
- High proportion of the energy as digestible fibre.
- Pellet durability can be an issue.

## Typical Analysis

• Dry Matter – 90.0%	• Sugars – 5.0%
• Crude protein – 34.0%	• NDF – 40%
• MER 13.7 MJ/Kg	• Oil AH – 8.5%
• Starch – 5.0 %	

## Daily feed rates (per head basis)

Milking Cows	Up to 4 (typically 3)kg
Dry Cows	Up to 2kg
Replacement Heifers	Up to 3kg and up to 35% of the DMI
Calves (to 12 weeks)	Up to 1.5kg and up to 25% of the DMI
Growing Cattle	Up to 2.5kg and up to 40% of the DMI
Finishing Cattle	Up to 4kg and up to 40% of the DMI
Suckler Cows	Up to 4 (typically 2)kg
Ewes and Rams	Up to 1 (typically 0.5)kg
Hoggets and Lambs	Up to 0.75kg and up to 50% of the DMI

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## WHEATFEED

A well-balanced energy, starch and digestible fibre feed material. A by-product of flour manufacturing from screened grains of wheat or de-husked spelt. It consists principally of fragments of the outer skins and particles of grain from which less of the endosperm has been removed than in wheat bran. Available as a meal or 6, 8 and 10mm pellets.

### Nutritional Benefit

Highly digestible, but quality varies between production plants. Ideal for ruminants and pig feed and also for horse feed. A good source of phosphorus, but low in calcium, sodium and vitamins.

### Features

- Useful source of starch.
- Balanced supply of readily digestible fibre, protein and starch.
- Good quality and consistent pellet. Easily stored, suitable for a wide range of livestock and incorporated into most feeding systems.

### Typical Analysis

• <i>Dry Matter</i> – 86.0%	• <i>Sugars</i> – 6.5%
• <i>Crude protein</i> – 17.5%	• <i>NDF</i> – 40%
• <i>MER 11.5 MJ/Kg</i>	• <i>Oil AH</i> – 4.0%
• <i>Starch</i> – 27.5 %	

### Daily feed rates (per head basis)

<i>Milking Cows</i>	<i>Up to 3 (typically 2)kg</i>
<i>Dry Cows</i>	<i>Up to 3kg</i>
<i>Replacement Heifers</i>	<i>Up to 3kg and up to 35% of the DMI</i>
<i>Calves (to 12 weeks)</i>	<i>Up to 1kg and up to 25% of the DMI</i>
<i>Growing Cattle</i>	<i>Up to 3kg and up to 35% of the DMI</i>
<i>Finishing Cattle</i>	<i>Up to 4kg and up to 40% of the DMI</i>
<i>Suckler Cows</i>	<i>Up to 4 (typically 2)kg</i>
<i>Ewes and Rams</i>	<i>Up to 1 (typically 0.5)kg</i>
<i>Hoggets and Lambs</i>	<i>Up to 1kg and up to 35% of the DMI</i>

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