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Welcome to the world of Molasses GB



We have been importers and marketers of molasses products to the British Agriculture sector since 1912, and began trading under the name **United Molasses** in 1926. At UM we have successfully grown and developed our business over the years through a strong commitment to our core values:-

- Supplying quality products you can trust
- Developing innovative liquids at cost-effective prices
- Providing the highest level of customer and technical support

At **United Molasses GB** we recognise that even at times when milk and beef prices are trending favourably that farmers still face plenty of challenges whether it be poor grass growth, lack of forage or volatile commodity prices.

Our focus on supporting farming will be to ensure that the products we offer continue to play important roles as feed materials that add value and provide innovative solutions to on farm ration requirements. As part of our ongoing commitment to providing clarity and value to our customers, we have taken the decision to rebrand a selection of of our current Nutrimaize range products under a new product range name: MOLPRO. This move helps us to better align our product lines with the needs of our customers and allows for the easier selection of one of our regulated release protein liquids based on our customers specific feeding goals and dietary requirements on farm.

If you require any further information from us on any of our products and/or services please don't hesitate to contact one of our friendly and experienced team who will be happy to assist you.

Yours faithfully















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Why feed Molasses?

To help explain the reasons why you should feed molasses to ruminants we would like to introduce MADI, the United Molasses GB Cow!

Meet MADI the United Molasses GB cow

MADI represents:

Molasses in A well balanced ruminant ration on farm

Molasses in a **D**iet formulated to best utilise home grown forage

Molasses in an Ideal mix of feeds to improve rumen performance

The best source of sugars for cows

Improves ration palatability

Increases Dry Matter intakes

Helps to prevent the potential risk of acidosis

Stimulates fibre digestion in the rumen

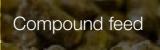
Improve on farm sustainability

Reduces ration sorting

Lowers dust levels

Supports milk proteins

Molasses is widely known as a complementary feed that improves ruminant productivity by supplying lots of rapidly fermentable carbohydrates to a diet through its Sugars but MADI also represents all the many other benefits that Molasses brings both to the rumen and day to day feeding on farm!



Molasses products

Cereals, meals, straights, co-products, minerals and other on-farm feeds

Home grown forage









How to feed liquids

Molasses is a by-product liquid from the sugar manufacturing industry. Sugar, in particular sucrose is the major component of molasses making it a rich energy source of readily available sugars for feeding in a variety of livestock rations.

Molasses and co-product liquids can be fed to all classes of stock through various means on farm.

Mixer Wagons

The most common route in cattle rations is to include bulk liquids in a total mixed ration via a mixer wagon. The liquid is gravity fed into a mixer wagon with the quantity weighed in on load cells. Molasses should be one of the first ingredients to be incorporated in the mixer wagon.

Home mixing

A home batch mixer can be used where molasses is gravity fed from a measuring tank onto the meal directly. Molasses is best incorporated during the mixing cycle and should be the last ingredient added. The exact inclusion level will vary depending on the ingredients in mix and subsequent handling methods.

Lick-Wheel Feeders

Molasses and co-product liquids can also be fed via various types of free access lick-wheel feeders. The type of feeder will vary depending on target stock type and livestock numbers.











Which liquid should I use?



Supplementing Grass Silage Diets

Grass Silage is a great economical source of home grown nutrients and typically contributes 50% of the forage component in winter rations. However the quality of grass silage can be quite variable so using sugar cane molasses as a supplementary feed will provide a nutritional boost through its readily available fermentable sugars in addition to improving overall ration palatability.



Supplementing Mixed Forage Rations

In addition to Grass Silage other forages such as Maize Silage or Wholecrop can be added to a ration to help improve intakes and to provide a higher energy contribution from forage. However it is still important to make sure the diet is nutritionally balanced, for example our Nutrimaize products can help ensure enough ERDP and readily available sugars are present in a dairy ration to maximise rumen performance.



Buffer feeding with Grass

Maximising yields from grazed grass typically requires a balanced diet through the use of buffer feeding. This is because it is important to give grass time to recover through the grazing season or the quality can vary quite significantly especially in the spring. Liquids make a great additive in a buffer feed, supplying readily available sugars or protein to complement the primary conserved forage.

CHOOSE

CHOOSE

>

CHOOSE

>









Which liquid for supplementing grass silage diets?

CHECKLIST

1. Are you feeding large quantities of processed or ground cereals?



Our product suggestions:

Golden Malt Syrup Golden Pro 30 Pot Ale Syrup



2. Do you want a liquid with >60% sugars?





3. Do you need good flowability at low temperatures?



Our product suggestions:

Caneflow Molaferm Ewemol G+



Our product suggestions:

Farm Molasses

4. Do you want a liquid with >10% Crude Protein?



Our product suggestions:

Proflow Nutrimol Scotmol Scotmol Pro



Our product suggestions:

Molaferm Pro

Molamol

Palamol









Which liquids to use in a mixed forage ration

CHECKLIST

1. Are you feeding large quantities of processed or ground cereals?



Our product suggestions:

Golden Malt Syrup Golden Pro 30 Pot Ale Syrup



2. Do you want a liquid with >50% sugars?



NO

Our product suggestions:

Molpro Extra 35 Molpro Super Pro 40 Molpro Super 50

3. Do you want a liquid with a high level of ERDP?



NO

Our product suggestions:

Molaferm Molaferm Pro Molamol Palamol

4- Do you want a liquid containing regulated release ERDP from Urea?



Our product suggestions:

Nutrimaize 46

Nutrimaize 40

Nutrimaize 28

Nutrimaize 20











Which liquid for cost effective buffer feeding cows at grass

CHECKLIST

1. What is the main conserved forage being buffer fed?



SEE QUESTION 2 >





2. MAIZE/WHOLECROP: Do you want a liquid containing regulated release ERDP from Urea?



Our product suggestions:

Nutrimaize 46 Nutrimaize 40 Nutrimaize 28 Nutrimaize 20 Molpro Sweet 30 NO

3. GRASS SILAGE: Do you need the liquid to flow at low temperatures?



Our product suggestions:

Caneflow Molaferm Molaferm Pro

Molamol Ewemol G+



Our product suggestions:

Farm Molasses

4. STRAW: Do you want to boost protein levels?



Our product suggestions:

Golden Malt Syrup Golden Pro 30 Pot Ale Syrup
Molpro Extra 35
Molpro Super Pro 40
Molpro Super 50



Our product suggestions:
Scotmol
Scotmol Pro
Nutrimol







Challenges of preserving a forage based TMR at feeding



A common feeding challenge during warmer months is maintaining the quality of a forage based total mixed ration (TMR) when it is put out for feeding and left for up to 24 hours.

The risk of aerobic spoilage arises when silage is exposed to air, triggering a secondary fermentation process that can rapidly promote microbial growth. This will lead to a deterioration in the forage quality nutritionally and likely produce an odour to the TMR, both of which can lead directly to reduced intakes, feed wastage and ultimately a drop in performance.

Through an applied research collaboration between United Molasses and Kemin Europa N.V. we found that adding the synergistic blend of molasses + Kemin's Myco CURB ES slowed down the effects of the secondary fermentation reaction in silage over 24 hours. Trials showed a clear positive response in reducing mould growth in a UK forage based TMR. (see graph below).

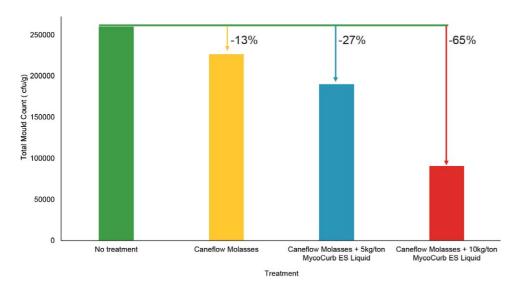


FIGURE 1: Reduction of total mould counts in TMR by supplementation of Caneflow molasses with increasing dosage of MycoCurb ES Liquid after 24 hours at 30°C

The benefits of adding Molasses + Myco CURB ES to a forage based TMR

- Preserves the quality of a forage based ration over a 24 hour period by reducing mould growth and slowing down the effects of secondary fermentation even at an elevated temperature of 30°C, commonly observed in summer time.
- Ideal TMR additive solution for once a day feeding where forage quality can gradually decrease over several hours due to aerobic spoilage
- Preservation of forage quality through adding molasses + Myco
 CURB helps to maintain daily intakes and reduce wastage on farm
- Improving the preservation of a silage will help maintain animal performance in terms of milk yield and daily live weight gain

Which molasses products are available with Myco CURB ES?

Myco CURB ES can be added to all of our liquids in the UMGB farm product range at addition rates of 5kg and 10kg per tonne respectively.

Look out for this note on our Product Pages:

Available with Myco-Curb

TO FIND OUT MORE: call 0151 955 4850 NOW







Product Range Summary

The range of bulk liquids available from United Molasses is the result of many years of product innovation and development. Each product has particular attributes and characteristics that make them ideal liquids for different feeding scenarios.

Cane Range

Our Cane range liquids are rich in SUGAR! The high content of this nutrient in these liquids comes from the best source possible, the sugar fields! These products are ideal for balancing grass silage in dairy rations. These liquids are manufactured from either straight sugar cane molasses or a blend of sugar cane and sugar beet molasses.

Molaferm Range

These high protein blends are based on cane molasses or a cane and beet molasses blend being precision blended with condensed molasses solubles (a high protein co-product from the fermentation of molasses) or other quality assured protein co-product liquids such as desugared beet molasses or Pot Ale Syrup. Our Cane Blend liquids provide a more balanced analysis making them ideal for most types of dairy, beef and sheep feeding scenarios.

Straights Range

In addition to supplying blends, UM also sources and supplies valuable co-product liquids such as Pot Ale Syrup straight from the distillery's in Scotland.

Nutrimize Range

The incredibly popular Nutrimaize range is manufactured by blending molasses with urea using our unique and innovative bonding process. The result is a range of liquids that when broken down in the rumen have a more regulated release of nitrogen and sugars to help optimise rumen efficiency. The high ERDP of these products make them ideal for dairy and beef diets based on predominantly maize silage. (See page 20)

Molpro Range

Our Molpro range is manufactured by blending molasses and urea using the same innovative bonding process as our popular Nutrimaize range (see page 28). The Molpro products are specifically formulated to produce high protein, high energy, easy flowing, value focused liquid solutions suitable for primarily mixed forage diets.

Protein range

Our protein range features easy to handle liquids that are all excellent sources of non-urea ERDP and ideal for use in both dairy and beef diets.

Glycerine & Blends

UM source only the highest quality non GM Glycerine as a by-product produced from the use of vegetable oils in the Biofuel industry. This energy dense liquid is available to purchase as either a straight (bulk tanker or IBC) or in a molasses blend such as our Ewemol G+ which is ideal for promoting healthy growth in both lambs and ewes.

Specialist Range

Through years of product innovation and development we have developed and established key specialist liquids such as our Molaferm Mag range for helping to combat the challenges of spring and autumn grazing.







Product Analysis

Please note that all 'typical' product analyses stated in this publication are quoted on a dry matter basis and intended as a guide only.

Raw materials used in liquid manufacture, many of which are co-product raw materials, are subject to potential variation depending on origin and availability. Therefore the values shown are not a guarantee of the actual analysis which as per current EU legislation will be provided on an as fed basis in the statutory statement at time of delivery.

The nutritive values of a feed can be converted from a dry matter basis to an as fed basis using the following formula:

Recommended feeding instructions

Where applicable we have stated recommended feeding rates for each product by livestock group however in practice there may be nutritional limiting factors (for instance an excess of Urea can be toxic) in specific farm diets depending on the other raw materials included, therefore we always recommend that theadvice of a qualified nutritionist is taken.

Abbreviation	Full Name	Units		
Dry Matter	Solids or Dry Matter	%		
Sugars	Total Sugars as Invert	%		
Protein	Crude Protein	%		
ME	Metabolisable Energy	MJ/kg		
Sales Area	Description			
Great Britain	Typical analysis in England, Wales & Scotland			
England & Wales	Typical analysis in England & Wales			
Scotland	Typical analysis in Scotland			

NOTE: All Analyses quoted are on a Dry Matter basis.







Product Comparison Table

		Typical A	Analysis (DM	l basis)		Physical P	roperties	S	F	eeding R	ates (Kg/⊦	lead/Day)
PRODUCT RANGE		Energy (MJ/Kg)	Sugars (%)	Protein (%)	Dry Matter (%)	Ease of Handling	Litres /Tonne	Specific Gravity	Dairy	Beef	Young Stock	Sheep
CANE	Farm Molasses	12.7	65	6.5	74	Moderate	714	1.4	1–3	1–2	1–2	0.2-0.5
	Caneflow	12.7	65	6.5	71	Good	727	1.38	1–3	1 –2	1–2	0.2-0.5
MOLAFERM	Molaferm	12.65	56	9	71	Good	730	1.37	1–3	1–2	1–2	0.2-0.5
	Molaferm Pro	12.5	55	10	70	Good	735	1.36	1–3	1–2	1–2	0.2-0.5
	Molamol	12.4	53	10.5	68	Good	740	1.35	1-2.5	1–2	1–2	0.2-0.5
	Palamol	12.2	50	12	66.5	Very Good	745	1.34	1-2.5	1–2	1–2	0.2-0.5
	Proflow	12.1	43.5	13	62.5	Excellent	760	1.32	1-2.5	1–2	1–2	0.2-0.5
	Nutrimol	12	40	13.5	60	Excellent	770	1.3	1-2.5	1–2	1–2	0.2-0.5
	Scotmol	12.5	50	12.5	60	Excellent	770	1.3	1-2.5	1–2	1–2	Χ
	Scotmol Pro	13	42	14	58	Good	780	-	1–2.5	1–2	1–2	Χ
STRAIGHTS	Pot Ale Syrup	14.2	-	25-35	43-44	Good	860	1.16	1–5	1–4	1–3	X
NUTRIMAIZE	Nutrimaize 46	11.2	55	46	70	Good	743	1.35	1–2	0.5–1.5	0.5–1.5	Χ
	Nutrimaize 40	12	58	40	66	Very Good	748	1.34	1–2	0.5-1.5	0.5-1.5	Χ
	Nutrimaize 28	12.2	62	28	66	Excellent	750	1.33	1–2	0.5-1.5	0.5-1.5	0.1-0.15
	Nutrimaize 20	12	54	20	64	Excellent	755	1.33	1–2	0.5–1.5	0.5–1.5	0.1-0.15
MOLPRO	Molpro Super 50	12.5	42	50	60	Excellent	775	1.29	1–2.5	1–2	1–2	Χ
	Molpro SuperPro 40	11.2	34	40	58	Excellent	785	-	1-2	1-1.5	0.5–1.5	Χ
	Molpro Extra 35	12	42	35	60	Excellent	750	1.33	1–2	0.5–1.5	0.5–1.5	Χ
	Molpro Sweet 30	11.6	38	30	60	Excellent	760	??	1–2	0.5–1.5	0.5–1.5	0.1-0.15
PROTEIN	Golden Malt Syrup	14	22	23.5	40	Excellent	804	1.22	1–4	1–4	1–3	Χ
	Golden Pro 30	11.8	16	30	50	Excellent	833	1.2	1–2	1–2	0.5-1.5	Χ
GLYCERINE	Ewemol G+	13	52	8	70	Excellent	730	1.37	1–3	1–2	1–2	0.2-0.5
& BLENDS	Feed Glycerine	15	-	-	86	Good	794	1.26	Please seek nutritional advice to determine best feeding rate			
SPECIALIST	Molaferm Mag 1.2	11.2	54	6.5	65	Excellent	757	1.32	1–3	1–2	1–2	0.1-0.4
	Molaferm Mag 3.5	8.8	42	5.5	57	Excellent	818	1.22	1–2	1–1.5	1–1.5	0.1-0.2







Farm Molasses

Suitable for feeding









Farm Molasses is a sweet black liquid which is high in both sucrose sugars and fermentable energy making it an ideal energy supplement and sweetening agent for dairy, beef and sheep rations. Feeding molasses will improve intakes of both good and poor forages by enhancing palatability whilst minimising waste.

- ✓ Good source of energy and sugars
- ✓ Enhances feed palatability
- ✓ Supports milk proteins
- ✓ Improves forage intake

Typical Analysis (DM Basis)

	Dry Matter (%)	Sugars (%)	Protein (%)	ERDP (g/Kg)	ME (MJ/Kg)	
Great Britain	74	65	6.5*	33	12.7	
	Ash (%)	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorous (%)
Great Britair	13.3	1	0.4	0.15	4.3	0.15

Recommended Feeding (per head/day)

Physical Properties

	Dairy	Youngstock	Beef	Sheep	Litres	Viscosity
	(Kg)	(Kg)	(Kg)	(Kg)	(per tonne)	(cps/20°C)
Great Britain	1–3	1–2	1–2	0.2–0.5	714	3000

* Can vary +/- 40% depending on origin of raw materials.

Did you know?

The flowability of Farm Molasses is dependent on temperature. Handling is acceptable in the typical UK climate, but can thicken in winter temperatures.



Caneflow

Suitable for feeding









Caneflow is a sweet black liquid that is high in fermentable energy and sugars. This product is 5 times **more flowable** than standard molasses at low temperatures and **improves intakes** of all forage types.

- ✓ Good source of energy and sugars
- ✓ Good handling at low temperatures
- ✓ Low substitution effect
- ✓ Improves forage intake

Typical Analysis (DM Basis)

	Dry Matter (%)	Sugars (%)	Protein (%)	ERDP (g/Kg)	ME (MJ/Kg)	
Great Britain	71	65	6.5*	33	12.7	
	Ash (%)	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorous (%)
Great Britai	n 13.3	1	0.4	0.15	4.3	0.15

Recommended Feeding (per head/day)

Physical Properties

	Dairy	Youngstock	Beef	Sheep	Litres	Viscosity
	(Kg)	(Kg)	(Kg)	(Kg)	(per tonne)	(cps/20°C)
Great Britain	1–3	1–2	1–2	0.2–0.5	727	1800

* Can vary +/- 40% depending onorigin of raw materials.

Did you know?

At 2 degrees celsius, the flowability of **Caneflow** is around 5 times better than Farm Molasses!











Molaferm

Suitable for feeding









Molaferm is a sweet liquid blend of molasses that boasts an excellent sugar content with the added bonus of rumen degradable protein. It can be used in almost any diet as a source of highly fermentable energy that boosts intake by improving ration palatability whilst also reducing ration sorting.

- ✓ Good source of energy with added protein
- ✓ Boosts diet palatability
- ✓ Reduces ration sorting
- √ Improves forage intake

Typical Analysis (DM Basis)

	Solids (%)	Sugars (%)	Protein (%)	ERDP (g/Kg)	ME (MJ/Kg)	
England/Wales	71	56	9*	40	12.65	
Scotland	71	56	12*	58	12.2	
	Ash (%)	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorous (%)
Great Britain	16	0.9	0.4	0.6	4.6	0.2

Recommended Feeding (per head/day)

Physical Properties

	Dairy (Kg)	Youngstock (Kg)	Beef (Kg)	Sheep (Kg)	Litres (per tonne)	Viscosity (cps/20°C)
Great Britain	1–3	1–2	1–2	0.2-0.5	730	1200
Scotland					735	1200

^{*} Can vary +/- 40% depending on origin of raw materials

Did you know?

Molaferm can be added to straw to make a buffer feed that can be used as a straight alternative to Silage.



Molaferm Pro

Available with Myco-Curb

home mixes.

Suitable for feeding









Molaferm Pro is a sweet molasses based liquid that is blended to produce a balanced combination of sugars and protein for use in the majority of farm rations. Perfectly suited to both Dairy and Beef diets this product will improve intakes and reduce dust levels in

- ✓ Source of sugars and protein
- ✓ Improves intakes of all forages
- ✓ Enhances palatability
- ✓ Suitable for use in most diets

Typical Analysis (DM Basis)

	Solids (%)	Sugars (%)	Protein (%)	ERDP (g/Kg)	ME (MJ/Kg)	
England/Wales	70	55	10*	52	12.5	
Scotland	70	50.3	14*	70	11.9	
	Ash (%)	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorous (%)
Great Britain	19	0.7	0.4	0.4	5.1	0.1

Recommended Feeding (per head/day)

Physical	Prop	erties
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	Dairy (Kg)	Youngstock (Kg)	Beef (Kg)	Sheep (Kg)	Litres (per tonne)	Viscosity (cps/20°C)
Great Britain	1–3	1–2	1–2	0.2–0.5	735	1000
Scotland				_	740	1000

* Can vary +/- 40% depending on origin of raw materials

Did you know?

Molaferm Pro when used with Maize Silage or Wholecrop wheat provides sugars that work as an ideal complement to the starch in the forage.











Molamol

Suitable for feeding









Molamol is a highly palatable liquid blend of molasses which provides a good balance of sugars and protein for a farm ration. Ideal for use in a dairy or beef total mixed ration it will encourage Intakes of less palatable feeds. Easy to handle it will also reduce dust in home mixes.

- ✓ Balanced source of sugars and protein
- ✓ Improves dry matter intake
- Highly palatable
- ✓ Ideal for use in most diets

Typical Analysis (DM Basis)

	Solids (%)	Sugars (%)	Protein (%)	ERDP (g/Kg)	ME (MJ/Kg)	
England/Wales	68	53	10.5*	60	12.4	
Scotland	68	42	16.5*	83	11.8	
	Ash (%)	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorous (%)
Great Britain	20	0.9	0.5	0.8	5.2	0.2

Recommended Feeding (per head/day)

Physical Properties

	Dairy (Kg)	Youngstock (Kg)	Beef (Kg)	Sheep (Kg)	Litres (per tonne)	Viscosity (cps/20°C)
Great Britain	1-2.5	1–2	1–2	0.2-0.5	740	850
Scotland					745	850

^{*} Can vary +/- 40% depending on origin of raw materials

Did you know?

Molamol is a cost effective liquid that combines great palatability with a well balanced analysis.



Palamol

Available with Myco-Curb

Suitable for feeding









- **Palamol** is a blended combination of sugar cane molasses, condensed molasses solubles and our well known aromatic caramel flavouring. A very versatile liquid suitable for all farm stock, this liquid can be used in a wide range of feeding scenarios as a balanced source of sugars and protein
- ✓ Boosts Intakes of all forage types
- √ 3 x higher protein than cane molasses
- ✓ Suitable for all farm stock
- Can be used as a pour-on liquid

Typical Analysis (DM Basis)

that can **boost intakes** of all forage types.

	Solids (%)	Sugars (%)	Protein (%)	ERDP (g/Kg)	ME (MJ/Kg)	
England/Wales	66.5	50	12*	78	12.2	
Scotland	66.5	40	18*	103	11.2	
	Ash (%)	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorous (%)
Great Britain	21	0.9	0.9	0.3	5.4	0.2

Recommended Feeding (per head/day)

	Dairy (Kg)	Youngstock (Kg)	Beef (Kg)	Sheep (Kg)
Great Britain	1-2.5	1–2	1–2	0.2-0.5
Scotland				

^{*} Can vary +/- 40% depending on origin of raw materials

Physical Properties

Litres

(per tonne)

745

750

Did you know?

Palamol can be used as a pour-on product to encourage better intakes of poor palatability feeds.



Viscosity

(cps/20°C)

750

750







Proflow

Suitable for feeding









Proflow is a blend of sugar cane molasses and condensed molasses solubles that is formulated to provide a **balanced source of dietary protein** and sugars that is suitable for a wide range of feeding scenarios and is **easy to handle** at low winter temperatures. **Proflow** also contains our signature caramel flavour.

- ✓ Balanced source of sugars and protein
- ✓ Effective de-duster in home mixed rations
- ✓ Easy to handle
- ✓ Contains signature caramel flavour

Typical Analysis (DM Basis)

	Solids (%)	Sugars (%)	Protein (%)	ERDP (g/Kg)	ME (MJ/Kg)	
England/Wales	62.5	43.5*	13*	84	12.1	
Scotland	62.5	30	20*	135.2	11	
	Ash	Calcium	Magnesium	Sodium	Potassium	Phosphorous
	(%)	(%)	(%)	(%)	(%)	(%)
Great Britain	23	0.8	0.7	0.4	5.6	0.2

Recommended Feeding (per head/day)

Physical Properties

	Dairy (Kg)	Youngstock (Kg)	Beef (Kg)	Sheep (Kg)	Litres (per tonne)	Viscosity (cps/20°C)
Great Britain	1–2.5	1–2	1–2	0.2-0.5	760	450
Scotland					768	400

^{*} Can vary +/- 40% depending on origin of raw materials.

Did you know?

Proflow can be used effectively as either a palatability enhancer in a TMR or as a de-duster.



Nutrimol

Available with Myco-Curb

Suitable for feeding









Nutrimol is a molasses based liquid blend that improves diet **palatability** while simultaneously offering a well-balanced combination of both **sugars** and **protein** at a **cost-effective** price. Very **easy to handle** at all temperatures this free flowing liquid is also a very effective **de-duster** and comes with the unique **enhanced aroma** of a unique fruity liquorice flavour.

- ✓ Cost effective liquid source of nutrients
- De-duster in home mixed rations
- Easy to handle at low temperatures
- ✓ Unique fruity liquorice flavour

Typical Analysis (DM Basis)

	Solids (%)	Sugars (%)	Protein (%)	ERDP (g/Kg)	ME (MJ/Kg)	
England/Wales	60	40*	13.5 [†]	90	12	
Scotland	60	35	22*	110	12.2	
	Ash (%)	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorous (%)
Great Britain	23.5	0.8	0.7	0.8	5.5	0.2

Recommended Feeding (per head/day)

Physical Properties

	Dairy (Kg)	Young stock (Kg)	Beef (Kg)	Sheep (Kg)	Litres (per tonne)	Viscosity (cps/20°C)
Great Britain	1–2.5	1–2	1–2	0.2–0.5	770	400
Scotland					775	400

^{*} Can vary +/- 20% depending on origin of raw materials. † Can vary +/- 50% depending on origin of raw materials. Please seek nutritional advice before feeding this liquid to ruminant youngstock under 5 months or in a diet that contains Grass Silage.

Did you know?

Nutrimol is an ideal liquid to use in a home mixed ration to reduce dust.



CONTACT US FOR DETAILS







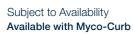
Scotmol

Suitable for feeding









Scotmol is a combination of sugar cane molasses, condensed molasses solubles and Scottish distillery syrups. This liquid combines the energy and protein of the distillery syrups with the high dry matter and sucrose content of the molasses to give a balanced and versatile product. Very easy to handle in winter conditions.

- ✓ Boosts forage intake
- ✓ Source of energy and protein
- ✓ Easy to handle
- ✓ Background copper content useful for cattle

Typical Analysis (DM Basis)

	Solids (%)	Sugars (%)	Protein (%)	ERDP (g/Kg)	ME (MJ/Kg)	
England/Wales	60	50	12.5*	114	12.5	
Scotland	60	43	16*	114	13.4	
	Ash (%)	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorous (%)
Great Britain	16	0.5	0.5	0.25	3	0.3

Recommended Feeding (per head/day)

Physical Properties

	Dairy (Kg)	Youngstock (Kg)	Beef (Kg)	Sheep (Kg)	Litres (per tonne)	Viscosity (cps/20°C)	
Great Britain	1–2.5	1–2	1–2	X	770	300	
Scotland					780	300	

* Can vary +/- 40% depending on origin of raw materials.

Did you know?

Scotmol can be added to straw at high levels and fed as an alternative to silage in both dairy and beef cattle rations.



Scotmol Pro

Available with Myco-Curb

Suitable for feeding









Scotmol Pro is a product that combines the energy rich properties of Sugar Cane Molasses, Desugared Beet Molasses and Distillery syrups to create a **free flowing product** that is **high** in both energy and protein. This liquid will improve palatability and Dry Matter intakes in most cattle diets.

- ✓ Boosts forage intakes
- ✓ Source of energy and protein
- ✓ Free flowing liquid at low temperatures
- ✓ Suitable for most cattle diets

Typical Analysis (DM Basis)

	Dry Matter (%)	Sugars (%)	Protein (%)	ME (MJ/Kg)	Litres (per tonne)	Viscosity (cps/20°C)
England/Wale	s 58	42	14	13	780	240
Scotland	58	42	14	13	780	240
		* Can vary +/- 20%		w materials. † Can va		pending on origin of raw materials
	Ash	Calcium	Magnesium	Sodium	Potassium	Phosphorous
	(%)	(%)	(%)	(%)	(%)	(%)
Great Britai	n 20	0.6	0.6	0.4	8	0.3

* Can vary +/- 40% depending on origin of raw materials

Recommended Feeding (per head/day)

Physical Properties

	Dairy	Youngstock	Beef	Sheep	Litres	Viscosity
	(Kg)	(Kg)	(Kg)	(Kg)	(per tonne)	(cps/20°C)
Great Britain	1–2.5	1–2	1–2	Х	780	240

Did you know?

Scotmol Pro can be added to straw at high levels and fed as an alternative to silage in both dairy and beef cattle rations









Pot Ale Syrup

Suitable for feeding



Subject to Availability

Pot Ale Syrup is a co-product liquid of the malt whisky distillery process that contains a highly nutritious blend of carbohydrates, yeast residues, proteins and minerals. It is highly palatable, enhances forage intake and provides a valuable source of dietary protein and energy for farm livestock.

- ✓ A high energy easy to handle liquid
- Low pH so has excellent keeping qualities
- Available in full arctic loads
- Improves palatability and intakes

Typical Analysis (DM Basis)

	Dry Matter (%)	Sugars (%)	Protein (%)	ERDP (g/Kg)	ME (MJ/Kg)	
Great Britain	43–44	_	25–35	266	14.2	
	Ash (%)	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorous (%)
Great Britain	10	0.2	0.6	0.1	2.4	2.1

Recommended Feeding (per head/day) Physical Properties

	Dairy	Youngstock	Beef	Sheep	Litres	Viscosity
	(Kg)	(Kg)	(Kg)	(Kg)	(per tonne)	(cps/20°C)
Great Britain	1–5	1–3	1–4	Х	860	500

Please seek nutritional advice before feeding this liquid to ruminant young stock under 5 months or in a diet that contains Grass Silage.

Did you know?

Pot Ale Syrup is a 100% natural liquid with all the benefits of Scottish distillery syrups including high energy and protein. Due to naturally occurring copper, **Pot Ale Syrup** can present a nutritional hazard when fed to sheep, especially continental/lowland breeds. Available in 28 tonne full artic loads.



For the latest news on Molasses as well as valuable feeding tips, subscribe to our eNewsletter







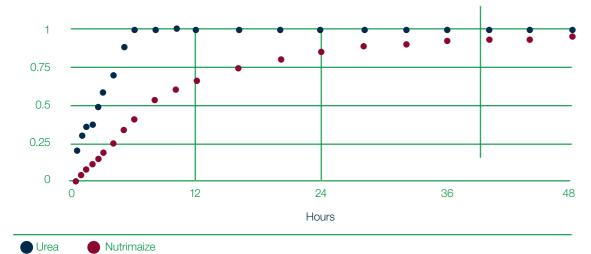


The Nutrimaize Range

Blended from sugar cane molasses and feed grade urea using a unique 32 bonding process our **Nutrimaize and Molpro** products have been scientifically proven to regulate the release of nitrogen during the first 24-48 hours after consumption.

Using the Bioparametrics Feed and Forage Analytical Services, trials have shown that five hours after consumption, 90% of the nitrogen in feed grade urea had been released but only 35% of the nitrogen from the **Nutrimaize 46** was released during the same time period (see Graph below).

COMPARISON OF NITROGEN RELEASE RATE FROM FEED GRADE UREA AND NUTRIMAIZE 46 AFTER CONSUMPTION



This slower more regulated release of nitrogen means that our **Nutrimaize** products are the perfect complement for diets containing maize silage as they can help to maximise starch digestion. Urea is the key diet ingredient for balancing maize silage but is very quickly degradable, so Nutrimaize's slower release of urea means better synchronicity between the availability of nitrogen during starch digestion. This also means less chance of acidosis as the starch is being utilised more efficiently.

Nutrimaize 46

Suitable for feeding







nutriopt



Available with Myco-Curb

Nutrimaize 46 is a sweet black liquid high in both **sugars** and **protein** which is based on a blend of pure cane molasses and bonded urea. Ideal as a dietary protein supplement for maize silage or other low protein forages it also increases intakes and helps to improve milk quality. The bonded urea element in the liquid gives a phased release of energy and protein for better rumen utilisation.

- ✓ Combination of high protein and sugars
- ✓ Contains bonded urea for regulated protein release
- ✓ Protein supplement for maize silage
- ✓ Improves forage intakes

Typical Analysis (DM Basis)

	Solids (%)	Sugars (%)	Protein (%)	ME (MJ/Kg)		Nutri-Opt and DietCheck values are available for this product
Great Britain	70	55	46	11.2		
	Ash (%)	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorous (%)
Great Britain	12.8	0.7	0.35	0.2	2.3	0.2

Recommended Feeding (per head/day)

Physical Properties

	Dairy	Youngstock	Beef	Sheep	Litres	Viscosity
	(Kg)	(Kg)	(Kg)	(Kg)	(per tonne)	(cps/20°C)
Great Britain	1–2	0.5–1.5	0.5–1.5	X	743	800

feeding in a diet that contains Grass Silage. This product contains Urea

Did you know?

Trials have shown that Nutrimaize 46 can be used to replace a soya/rape mix 1:1 with increased forage intakes and improved milk quality (Rodbaston college) and is more economical to use against similar products with a lower DM and CP content.







Nutrimaize 40

Suitable for feeding









Nutrimaize 40 is a sweet liquid feed based on a blend of pure cane molasses and urea that offers a combination of both high **sugars** and **protein**. Ideal for use as a protein balancer in a maize or whole crop based diet this easy to handle liquid will also boost intakes by improving palatability.

- ✓ Good source of high sugars and protein
- ✓ Supplement for low protein forages
- ✓ Contains bonded urea for regulated protein release
- ✓ Improves ration palatability

Typical Analysis (DM Basis)

	Solids (%)	Sugars (%)	Protein (%)	ERDP (g/Kg)	ME (MJ/Kg)	
Great Britain	66	58	40	335	12	
	Ash (%)	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorous (%)
Great Britain	11.4	0.7	0.4	0.2	3.5	0.2

Physical Properties Recommended Feeding (per head/day)

	Dairy	Youngstock	Beef	Sheep	Litres	Viscosity
	(Kg)	(Kg)	(Kg)	(Kg)	(per tonne)	(cps/20°C)
Great Britain	1–2	0.5–1.5	0.5–1.5	X	748	700

We do not recommend feeding this liquid to ruminant youngstock under 5 months. Please seek nutritional advice before feeding in a diet that contains Grass Silage. This product contains Urea.

Did you know?

All of our **Nutrimaize** range contain our unique bonded urea which breaks down to degradable protein in a slow release form.



CONTACT US FOR DETAILS

Nutrimaize 28

Suitable for feeding









Available with Myco-Curb

Nutrimaize 28 is a sweet high protein liquid feed which is based on a blend of pure cane molasses and bonded urea that is ideal for use as a **maize balancer** or in diets based on whole crop wheat. The high nutrient density of Nutrimaize 28 is designed to make it perfect for high yielding dairy cows. The bonded urea in this liquid gives a regulated release of energy and protein.

- ✓ Source of sugars and protein
- ✓ Contains bonded urea for regulated protein release
- √ Versatile can be used in dairy, beef & sheep diets
- ✓ Easy to handle at low temperatures

Physical Properties

Typical Analysis (DM Basis)

	Solids (%)	Sugars (%)	Protein (%)	ERDP (g/Kg)	ME (MJ/Kg)	
Great Britain	66	62	28	225	12.2	
	Ash (%)	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorous (%)
Great Britain	13.5	1	0.4	0.15	3.5	0.3

Recommended Feeding (per head/day)

	Dairy (Kg)	Youngstock (Kg)	Beef (Kg)	Sheep (Kg)	Litres (per tonne)	Viscosity (cps/20°C)	
Great Britain	1–2	0.5–1.5	0.5–1.5	0.1–0.15	750	600	

We do not recommend feeding this liquid to ruminant youngstock under 5 months. Please seek nutritional advice before feeding in a diet that contains Grass Silage. This product contains Urea.

Did you know?

Nutrimaize 28 is a Urea based liquid that is suitable for feeding in all diets including dairy, beef and sheep! And is more economical to use against similar products with a lower DM and CP content.











Nutrimaize 20

Suitable for feeding









Nutrimaize 20 is a sweet molasses based liquid that has been manufactured with our regulated release bonded urea ingredient. A great source of protein for Maize based diets this product is the latest addition to our renowned **Nutrimaize** range.

- ✓ Regulated protein release
- ✓ Source of quality sugars
- ✓ Safer and easy way to add urea to a TMR
- ✓ Free flowing in cold weather

Typical Analysis (DM Basis)

	Solids (%)	Sugars (%)	Protein (%)	ERDP (g/Kg)	ME (MJ/Kg)	
Great Britain	64	54	20	180	12	
	Ash (%)	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorous (%)
Great Britain	18	1	0.4	0.2	4	0.2

^{*} Can vary +/- 20% depending on origin of raw materials.

Recommended Feeding (per head/day)

Physical Properties

	Dairy	Youngstock	Beef	Sheep	Litres	Viscosity
	(Kg)	(Kg)	(Kg)	(Kg)	(per tonne)	(cps/20°C)
Great Britain	1–2	0.5–1.5	0.5–1.5	0.1–0.15	755	500

We do not recommend feeding this liquid to ruminant youngstock under 5 months. Please seek nutritional advice before feeding in a diet that contains Grass Silage.

This product contains Urea.

Did you know?

Feeding **Nutrimaize** in a TMR allows you to add to high levels of protein whilst avoiding a potentially hazardous overload of Nitrogen in the rumen.



More than just sugars...

Molasses is not JUST a great source of energy to ruminant diets...









Molpro Product Range

As part of our ongoing commitment to providing clarity and value to our customers, we have taken the decision to rebrand a selection of our current Nutrimaize range products under a new product range name:



This change reflects a clearer distinction within our overall product range. Molpro will now represent our value targeted regulated release protein range, offering dependable quality at competitive prices, while the Nutrimaize name will continue to represent our premium range of protein liquid solutions.

There is no change to the formulation or quality of the products being rebranded – only the name will be updated. This move helps us better align our product lines with the needs of our customers and allows for easier selection based on specific feeding goals and dietary requirements.

Previous ranges	Molpro range
Nutrimol Super 50	Molpro Super 50
UM Super Pro 40	Molpro Super Pro 40
Nutrimol Extra	Molpro Extra 35
Nutrimaize Sweet	Molpro Sweet 30

We appreciate your continued support and look forward to bringing greater clarity to our product ranges with these changes.

Molpro Super 50

Suitable for feeding









UM has taken one of its established molasses blends and added an injection of its renowned bonded urea to create a free flowing liquid that will maintain its de-duster properties whilst supplying a liquid which now contains regulated protein release.

- ✓ Regulated protein release
- ✓ Unique fruity liquorice flavour
- ✓ Safer and easy way to add urea to a TMR
- ✓ Free flowing in cold weather

Typical Analysis (DM Basis)

	Solids (%)	Sugars (%)	Protein (%)	ERDP (g/Kg)	ME (MJ/Kg)	
Great Britain	60	42*	50	415*	12.5	
	Ash (%)	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorous (%)
Great Britain	17	1	0.6	0.5	6	0.3

Recommended Feeding (per head/day) Physical Properties

	Dairy (Kg)	Youngstock (Kg)	Beef (Kg)	Sheep (Kg)	Litres (per tonne)	Viscosity (cps/20°C)	
Great Britain	1–2.5	1–2	1–2	Х	775	350	

^{*} Can vary +/- 20% depending on origin of raw materials. Please seek nutritional advice before feeding this liquid to ruminant youngstock under 5 months or in a diet that contains Grass Silage. This product contains Urea

This product is available with Myco-Curb

Did you know?

The farmer friendly liquid combining high protein and sugars in a free flowing product in winter conditions.







Subject to Availability

Available with Myco-Curb

Molpro Super Pro 40

Suitable for









- ✓ Regulated protein release
- ✓ Higher protein alternative to Pot Ale Syrup
- ✓ Free flowing liquid ideal for winter feeding
- ✓ Improved palatability of dairy and beef TMRs

molasses. Super Pro 40 is an ideal fit for both dairy

Super Pro 40 is a highly palatable liquid that

combines an excellent source of regulated release

protein with the quality sugars found in sugar cane

and beef rations, especially when used in mixed forage based diets. It's easy to handle properties make it an ideal liquid for winter feeding.

Typical Analysis (DM Basis)

	Solids (%)	Sugars (%)	Protein (%)	ERDP (g/Kg)	ME (MJ/Kg)	
Great Britain	58	34*	40	360*	11.2	
	Ash (%)	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorous (%)
Great Britain		1.3	0.5	1.7	7.5	0.5

* Can vary +/- 40% depending on origin of raw materials.

Physical Properties

Recommended Feeding (per head/day)

	Dairy (Kg)	Youngstock (Kg)	Beef (Kg)	Sheep (Kg)	Litres (per tonne)	Viscosity (cps/20°C)	
Great Britain	1–2	0.5–1.5	1-2	Χ	785	240	

Did you know?

The aroma of this liquid is enhanced with our unique fruity liquorice flavour.



Molpro Extra 35

UM has taken one of its established molasses

blends and added an injection of its renowned bonded urea to create a free flowing liquid that

supplying a liquid which now contains regulated

will maintain its de-duster properties whilst

Subject to Availability

Available with Myco-Curb

protein release.

Suitable for feeding











- ✓ Regulated protein release
- ✓ Unique fruity liquorice flavour
- ✓ Safer and easy way to add urea to a TMR
- ✓ Free flowing in cold weather

Typical Analysis (DM Basis)

	Solids (%)	Sugars (%)	Protein (%)	ERDP (g/Kg)	ME (MJ/Kg)	
England/Wales	60	42	35*	285	12	
Scotland	60	34	35*	285	12	
	Ash (%)	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorous (%)
Great Britain	20	1	0.6	0.5	5	0.3

Recommended Feeding (per head/day)

Physical Properties

	Dairy (Kg)	Youngstock (Kg)	Beef (Kg)	Sheep (Kg)	Litres (per tonne)	Viscosity (cps/20°C)
Great Britain	1–2	0.5–1.5	0.5–1.5	Χ	750	500
Scotland					760	450

* Can vary from 30% depending on origin of raw materials. We do not recommend feeding this liquid to ruminant youngstock under 5 months. Please seek nutritional advice before feeding in a diet that contains Grass Silage. This product contains Urea

Did you know?

The aroma of this liquid is enhanced with our unique fruity liquorice flavour.









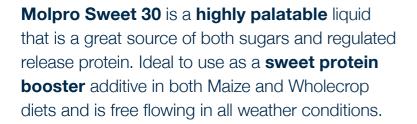
Molpro Sweet 30

Suitable for feeding









- ✓ Regulated release protein
- ✓Great combination of sugars and protein
- ✓Safe and easy way to add Urea to a TMR diet
- Free flowing in cold weather

Typical Analysis (DM Basis)

	Solids (%)	Sugars (%)	Protein (%)	ERDP (g/Kg)	ME (MJ/Kg)	
Great Britain	60	38	11.6	255	11.6	
	Ash (%)	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorous (%)
Great Britain	21	1	0.6	0.5	7.5	0.3

Recommended Feeding (per head/day)

Physical Properties

	Dairy	Youngstock	Beef	Sheep	Litres	Viscosity
	(Kg)	(Kg)	(Kg)	(Kg)	(per tonne)	(cps/20°C)
Great Britain	1–2	0.5–1.5	0.5–1.5	0.1–0.15	760	450

We do not recommend feeding this liquid to ruminant youngstock under 5 months. Please seek nutritional advice before feeding in a diet that contains Grass Silage. This product contains Urea.

Did you know?

Feeding **Molpro Sweet 30** in a TMR allows you to add to high levels of protein whilst avoiding a potentially hazardous overload of Nitrogen in the rumen.



Reasons to feed molasses

Molasses is a versatile and nutritious feed ingredient that can perform several key roles in a ruminant diet.

To help better explain these different roles that can be applied in multiple types of diets we have produced a series of A4 promotional flyers that we have called the **REASONS TO FEED MOLASSES** series. They are all available to download for free in pdf format.



Download your free copies today by scanning this QR code or visiting:

www.unitedmolasses.com and find out all you need to know









Golden Malt Syrup Suitable for feeding









Available with Myco-Curb

Golden Malt Syrup is a blend of co-products from the distillery and fermentation industries. An ideal well balanced low cost liquid feed for any farm mixed ration that can be fed in free access lick-wheel feeders, poured on forage or used as an ingredient in TMR rations. This liquid can also be used as a replacer for Pot Ale Syrup.



- ✓ Low-cost feed for dairy cows
- ✓ Source of energy and protein
- ✓ Substitute for Pot Ale Syrup

Typical Analysis (DM Basis)

	ry Matter (%)	Sugars (%)	Protein (%)	ERDP (g/Kg)	ME (MJ/Kg)	
England/Wales	40	22	23.5 [†]	247	14	
Scotland	46	8	32*	247	13	
	Ash (%)	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorous (%)
Great Britai	n 19.5	0.3	0.2	0.3	5.4	0.4

Physical Properties Recommended Feeding (per head/day)

Dairy (Kg)	Youngstock (Kg)	Beef (Kg)	Sheep (Kg)	Litres (per tonne)	Viscosity (cps/20°C)	
Great Britain 1-4	1–4	1–3	Χ	804	300	
Scotland				804	300	

^{*} Can vary from 50% depending on origin of raw materials. †Can vary +/- 40% depending on origin of raw materials. Please seek nutritional advice before feeding this liquid to ruminant young stock under 5 months or in a diet that contains Grass Silage.

Did you know?

Golden Malt Syrup is a 100% natural liquid with all the benefits of Scottish distillery syrups including high energy and protein.



Golden Pro 30

Suitable for feeding









Subject to Availability

Available with Myco-Curb

Golden Pro 30 is a highly palatable liquid that supplies an excellent source of non-urea ERDP which is ideal for use in ruminant rations. This liquid is free flowing so perfect for feeding at winter temperatures.

- ✓ Excellent source of non-urea ERDP
- ✓ Free flowing liquid
- ✓ Contains our signature caramel flavour
- ✓ Substitute for **Pot Ale Syrup**

Typical Analysis (DM Basis)

	Solids (%)	Sugars (%)	Protein (%)	ERDP (g/Kg)	ME (MJ/Kg)	
England/Wales	50	16*	30	247	11.8	
	Ash (%)	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorous (%)
Great Britain	19.5	0.3	0.2	0.3	5.4	0.4

Recommended Feeding (per head/day)

Physical Properties

	Dairy	Youngstock	Beef	Sheep	Litres	Viscosity
	(Kg)	(Kg)	(Kg)	(Kg)	(per tonne)	(cps/20°C)
Great Britain	1–2	0.5-1.5	1–2	X	833	300

* Can vary from +/- 20% depending on origin of raw materials. Please seek nutritional advice before feeding this liquid to ruminant young stock under 5 months or in a diet that contains Grass Silage

Did you know?

Golden Pro 30 is a 100% non-urea based liquid that is easy to handle even in harsh winter climates.











Feed Glycerine

Suitable for feeding









Feed Glycerine is a light coloured, odourless, sweet tasting, **energy dense liquid** that is a by-product of biofuel production using vegetable oils. Glycerine can help **improve energy supply** to high yielding dairy cows and have a **positive impact on health and performance** during their entire lactation.

Typical Analysis (DM Basis)

Physical Properties

	Solids	Glycerol	Ash	ME	Litres	Viscosity
	%)	(%)	(%)	(MJ/kg)	(per tonne)	(cps/20°C)
Great Britain	86	80 min	11.6	15	794	500-1500

Please seek nutritional advice to determine the best feeding rates for these liquids.

Did you know?

Researchers have determined that the net energy value of glycerine in sheep, steers and dairy cows was equal to or greater than that of Corn grain.

Ewemol G+

Suitable for feeding







Subject to Availability **Available with Myco-Curb**

Ewemol G+ combines our classic Molaferm product with the dynamic energy of Glycerine to produce a liquid that is ideally suited to balance high performance diets and promotes healthy growth in lambs and ewes.

- √ High energy liquid
- ✓ Ideal for high performance diets
- ✓ Promotes healthy growth in lambs and ewes
- ✓ Highly palaable liquid that boosts intakes

Typical Analysis (DM Basis)

	Solids (%)	Sugars (%)	Protein (%)	ERDP (g/Kg)	ME (MJ/Kg)	
England/Wales	70	52	8	63	13	
Scotland	70	52	8	63	13	
	Ash (%)	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorous (%)
Great Britain	16	0.6	0.6	0.5	5.7	0.3

Recommended Feeding (per head/day)

Physical Properties

	Dairy (Kg)	Young stock (Kg)	Beef (Kg)	Sheep (Kg)	Litres (per tonne)	Viscosity (cps/20°C)
Great Britain	1–3	1–2	1–2	0.2-0.5	730	1000
Scotland					730	1000

Did you know?

Glycerine is gluconeogenic which it means it stimulates glucose production thus producing more energy through metabolism.





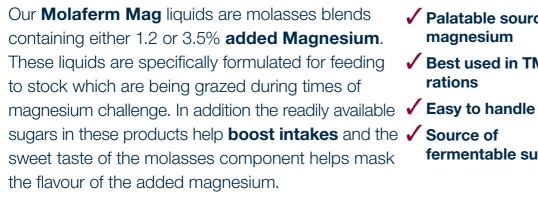


Molaferm Mag 1.2









- ✓ Palatable source of magnesium
- ✓ Best used in TMR rations
- fermentable sugars

Typical Analysis (DM Basis)

Dr	y Matter (%)	Sugars (%)	Protein (%)	ERDP (g/Kg)	ME (MJ/Kg)	
England/Wales	65	54*	6.5*	64	11.2	
Scotland	67	34	15	64	11.2	
	Ash (%)	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorous (%)
Great Britain	22	0.8	1.8	1.8	8.2	0.3

Recommended Feeding (per head/day) **Physical Properties**

Dairy	Youngstock	Beef	Sheep	Litres	Viscosity	
(Kg)	(Kg)	(Kg)	(Kg)	(per tonne)	(cps/20°C)	
Great Britain 1-3	1–3	1–2	0.1-0.4	757	700	

^{*} Can vary +/- 20% depending on origin of raw materials.

Did you know?

Mag liquids are ideal for feeding in free access lick-wheel feeders during spring and autumn grazing.

Molaferm Mag 3.5

Suitable for feeding









Our **Molaferm Mag** liquids are molasses blends containing either 1.2 or 3.5% added Magnesium. These liquids are specifically formulated for feeding to stock which are being grazed during times of magnesium challenge. In addition the readily available **Easy to handle** sugars in these products help **boost intakes** and the **V** Source of sweet taste of the molasses component helps mask the flavour of the added magnesium.

- ✓ Palatable source of magnesium
- Best used in TMR rations
- fermentable sugars

Typical Analysis (DM Basis)

Dr	ry Matter (%)	Sugars (%)	Protein (%)	ERDP (g/Kg)	ME (MJ/Kg)	
England/Wales	57	42*	5.5*	734	8.8	
Scotland	61	32.7	10	73	7.5	
	Ash (%)	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorous (%)
Great Britain	24	0.9	5.7	0.6	4.6	0.8

Recommended Feeding (per head/day)

Dairy (Kg)	Youngstock (Kg)	Beef (Kg)	Sheep (Kg)	Litres (per tonne)	Viscosity (cps/20°C)	
Great Britain 1-2	1–1.5	1–1.5	0.1-0.2	818	400	

* Can vary +/- 20% depending on origin of raw materials

Physical Properties

Did you know?

Mag liquids are ideal for feeding in free access lick-wheel feeders during spring and autumn grazing.







The viscosity conundrum

The viscosity of sugar cane molasses and why it can be so variable

Why can molasses be so viscous?

The viscosity of sugar cane molasses varies widely from one country to another and from one year to another. The viscosity is most notably influenced not by total sugar content but rather the non-sugar organic matter of which there can be wide variations. These variations can be a function of climate, soil and factory processing and also the conditions under which the origin sugar cane is harvested.

Sugar cane naturally contains polysaccharides, the amount of these carbohydrates though can increase depending on the length of time between the cane being cut and then subsequently reaching the factory for processing. High levels of polysaccharides in sugar cane can greatly increase the viscosity and the "gumminess" of the molasses.

Sugar Cane molasses also exhibits the phenomenon called critical viscosity – which means above a certain dry matter content the viscosity increases at a greater rate than might be expected from the increased dry matter content.

How do you alter the viscosity of molasses?

To overcome the operational challenges of thick molasses and the problem of critical viscosity the most common strategy is to reduce the dry matter content through either standardisation or blending with less viscous liquids such as CMS.

If you decrease the dry matter of molasses by approx. 2-3% this should roughly halve the viscosity of molasses at any given temperature. Alternatively molasses can be heated, on some origins increasing the temperature of the liquid by 10°C can reduce the viscosity by half. However just as heating can significantly lead to a decrease in viscosity if you allow molasses to cool to low temperatures it will get more viscous.

SEE OUR CANE VISCOSITY GRAPH



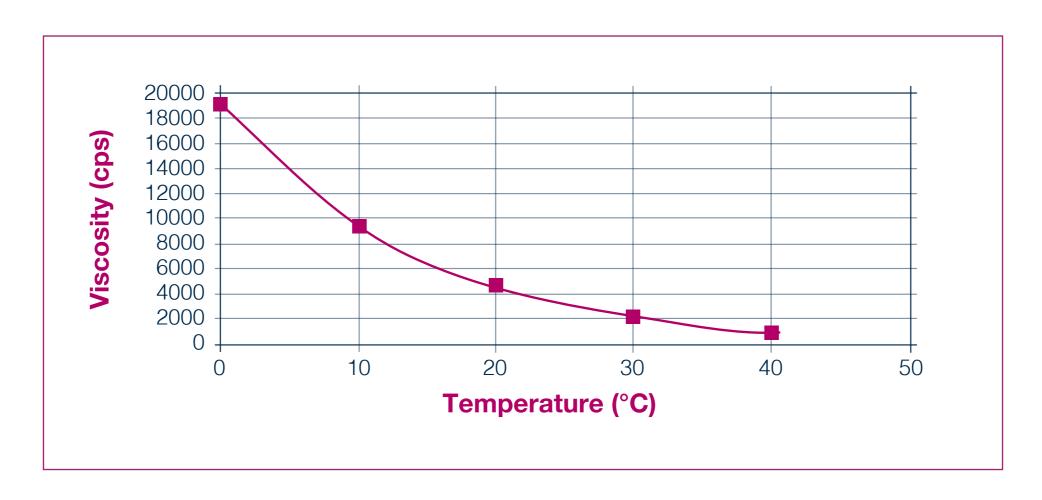






Effect of Temperature on the Viscosity of Farm Cane Molasses

(This may vary with origin by 1500 cps at 20°C and 4,000cps at 0°C)



In summary, the viscosity of sugar cane molasses is affected by its dry matter content, the temperature it's stored and the composition of the molasses itself in terms of its "gumminess" factor!

Most of UM's liquids are fine to use at ambient temperatures without a problem however we would recommend storing our higher dry matter products at 20°C for better ease of handling.







Storage & handling

Molasses liquids require specific handling techniques in order to make best use of them on farm. Our bulk liquids range is best stored in purpose built 12, 24 or 32 tonne tanks, complete with stands and 4inch / 100mm pipework and valves.

These tanks are designed to facilitate trouble free filling by a tanker and allow rapid discharge of the liquid, either into a mixer-wagon or a free-access lick wheel feeder. If you are interested in buying one of these tanks we can get you a quote from one of our trusted tank manufacturers and also give you details about our interest free tank scheme!



Vehicle access & delivery

United Molasses's range of bulk liquids are available in quantities ranging from a minimum of 5 tonnes up to a maximum of 29 tonnes.



Naturally, safe and reasonable access is necessary for the delivery of bulk liquids so it is important when considering buying a tank to ensure its location has good vehicle access for both 44ft artic and rear steer vehicles.



It is important when considering buying a tank to ensure its location has good vehicle access











Molasses Tank Scheme

The United Molasses tank scheme can help in the purchase of a new tank by offering a flexible mode of payment with no interest to pay for up to 36 months!

- No lump sum payment so the cost is spread
- No interest to pay
- Safe and easy way to handle bulk liquids on farm
- Solves potential farm storage issues





Tank Sizes currently available:

12 tonne:

dims. 2.74m x 1.83m x 1.83m (9' x 6' x 6'). High stand sold separately

24 tonne:

dims. 3.05m x 2.53m x 2.53m (10' x 8.3' x 8.3'). High stand sold separately

32 tonne:

dims. 4.27m x 2.53m x 2.53m (14' x 8.3' x 8.3'). High stand sold separately

41 tonne:

dims. 4.57m x 2.53m x 3.05m (15' x 8.3' x 10'). High stand sold separately

50 tonne:

dims. 5.49m x 2.53m x 3.05m (18' x 8.3' x 10'). High stand sold separately All tanks come with Gate valve, Camlock, Sight tube, Manhole and Lifting lugs. A suitable re-inforced concrete base is required for all tanks. Please check for details.

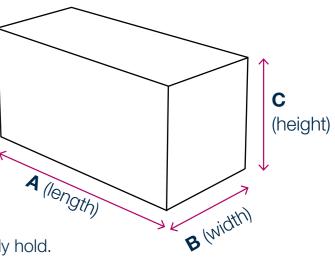
Product Volume Calculator

To calculate the volume of the molasses tank in m³ you do the simple sum of A x B x C

You then **multiply** the volume by the **Specific Gravity of** the molasses product

(You can find the individual product SG values in the product comparison table) to tell you how much of that

liquid your farm tank can physically hold.



For example if you have one of our standard 12 tonne tanks and are thinking of ordering Molaferm 20 you would do the following calculation:-

Total volume of tank: -

 $2.75 \text{m} \times 1.83 \text{m} \times 1.83 \text{m} = 9.21 \text{ m}^3 \text{ (see left for tank dimensions)}$

Then you multiply the volume by the SG of the product :-

 $9.21 \times 1.37 = 12.6 MT$ of Molaferm 20

Now we don't recommend you fill your tank right to the top as it is advisable to have a little head space but the above calculator should give you some good guidance on how much to order and when you will need to top the tank up!





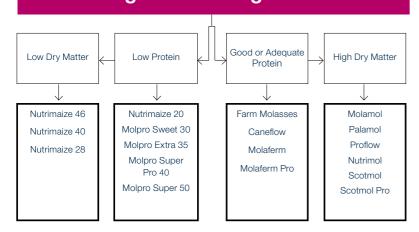


Feeding Challenges

Due to the min/max variation of the key analysis parameters in the Trouw Nutrition results for the early 1st cut grass silages 2025 you could pick out several scenarios to focus on for a feeding challenge so we have picked out three of them in low Sugars/RFCs, low Protein and High NDF and put together flow charts to assist in finding the most suitable molasses product for them.

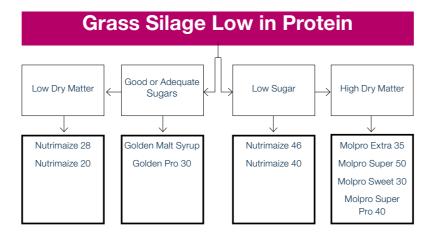
FEEDING CHALLENGE 1

Grass Silage Low in Sugars and RFC's



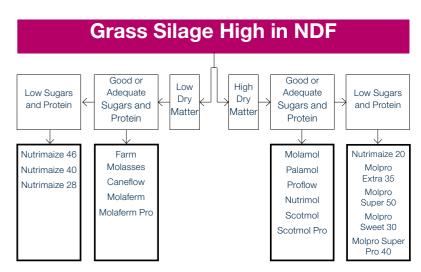
UM COMMENTS: This year we are seeing a massive range in sugars from as little as 0.2 to 9.6 but the average is below 2% so sugars will be critical in balancing diets as a PMR/TMR needs between 5 to 6% for optimum rumen function. Adding a molasses liquid such as **Caneflow** is the most effective way to raise the sugar level in a ruminant diet while also allowing you to fine tune RFCs for improved rumen function and better fibre digestion. United Molasses GB has liquids that will fit both high and low dry matter forage types.

FEEDING CHALLENGE 2



UM COMMENTS: Typically protein is a low concern parameter with grass silage but this year's results range from 8.1 to 20.9% which means not all farms will be within the typical 13 to 15% range. United Molasses offers a range of protein liquids including the regulated release protein **Nutrimaize** range and alternative non Urea options like **Golden Malt Syrup** and **Golden Pro 30**. It is essential to make sure you are supplying enough fermentable protein for microbial synthesis to occur efficiently in the rumen for optimum function plus these protein liquids also contain sugars making them ideal for balancing PMR/TMRs.

FEEDING CHALLENGE 3



UM COMMENTS: NDF is a measure of the total fibre in a forage, and like last year we are seeing high levels in the first cuts of grass silage. Too much NDF will slow down digestion, restrict intakes and reduce overall performance. The key to breaking down excess fibre in the rumen will be a good supply of RFCs through sugars which are broken down in the rumen in less than 2 hours after feeding and are a key driver in optimising milk production. Molasses liquids are the best source of sugars and the range of specs available from United Molasses mean you have a large range of options to select the best product to include in your PMR/TMR whether the Dry Matter is high or the protein is low!

IN CONCLUSION we are seeing a lot of variance in the early grass silage quality this winter so it will be key to add the right feed materials and additives to your PMR or TMR diet to get the nutrition correctly balanced. It will also be critical to ensure intakes are strong despite the less than ideal silage quality as turning home grown forage into litres of milk will always be a priority on farm. Like last year fibre levels will continue to be challenging in many 1st cut grass silage diets due to the over maturity of grass with late spring cutting so a good source of sugars and RFCs will also be essential to add into most diets. On this basis molasses liquids will tick the two most common need boxes on farm of improving intakes whilst supplying the sugars needed to optimise rumen function and due to the range of specs available from United Molasses you can find great versatility to help best fine tune these diets for this winter.





QUALITY

We strive for excellence in all we do



PROGRESSION

Innovating solutions to develop our people, products and services

INTEGRITY



Be honest, open and always try to do the right thing

Um Molasses GB values

COLLABORATION

Working together with internal and external stakeholders to achieve outstanding results

RESPECT

Being kind, understanding and supportive of each other



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