Whey Permeate 35











A palatable high energy, lactose rich, free flowing liquid designed to drive intakes and milk yield, stimulate rumen energy production and reduce diet sorting.

#Typical Analysis (on a dry matter basis)

Dry matter (%)	Energy (MJ ME/kg DM)	Crude protein (%)	Oil (%)	NDF (%)	Lactose (%)
35.0	12.5	5.0	0.8	0.0	~ 80.0

#Whey permeate is vulnerable to separation as the lactose will fall out of solution.

What are you trying to achieve?

Need	Feature	Benefit		
Drive intake	Highly palatable with low concentrate substitution rate.	Stimulates total feed intake, including home produced feeds, thus lowering feed costs.		
Increase milk yield	A ready source of fermentable energy as lactose sugar	Balances less rapidly digestible energy sources such as cereals and low protein forages.		
Reduce ration sorting and minimise dust	A binding liquid.	Livestock consume a more balanced ration, reducing the risk of acidosis and improving feed efficiency. Less dust reduces feed waste, improves the working environment and feed intakes.		
No processing, ready to feed, easy storage	High lactose liquid	Easy to store and convey.		

The predicted responses (benefits) assume that the specified nutrient, physical or structural dietary components are limiting livestock performance in the current ration.

Complementary Concentrate Feeds

- **High digestible fibre feeds** e.g. sugar beet feed products and soya hulls
- High starch feeds e.g. cereals
- Protein feeds e.g. distillers and rape seed meal
- Rumen bypass proteins e.g. SoyPass, Prototec



Recommended daily feed rates (per head basis)



Whey permeate can be fed as part of a TMR, within a blend or as a straight liquid by pouring onto other feeds.

Milking Cows	Up to 4 (typically 3)kg		
Dry Cows	Up to 2 kg		
Replacement Heifers	Up to 2 kg and up to 10% of the DMI		
Calves (to 12 weeks)	Up to 1 kg and up to 10% of the DMI		
Growing Cattle	Up to 2 kg and up to 15% of the DMI		
Finishing Cattle	Up to 3 kg and up to 15% of the DMI		
Suckler Cows	Up to 3 (typically 2)kg		
Ewes and Rams	Up to 0.5 (typically 0.25)kg		
Hoggets and Lambs	Up to 0.5 kg and up to 10% of the DMI		

DMI = dry matter index

Availability, handling and storage

Whey permeate is delivered in 29 tonne liquid tankers and is available UK wide, all year around. Tanks should be built to hold and dispatch bulk liquids. They should be well maintained and cleaned out regularly to prevent the build up of sediment. A 4-inch diameter pipe work is adequate to handle Whey permeate.

The high concentration of Lactose in 35 % dry matter whey permeate will start to settle out within an hour of delivery. The product must be agitated or circulated at least once a day, preferably prior to feeding, to ensure consistency as a layer of lactose sediment will build up in the tank which can solidify, for this reason we also recommend a load is fed within three weeks of delivery.

Additional information

Method of production

Whey permeate is a co-product from milk processing produced from cheese whey after the majority of the whey protein and some minerals have been removed by filtration to produce a very high sugar liquid.

Quality Assurance

Whey permeate is a FEMAS assured (or a recognised equivalent) product. Whey permeate is listed under number 8.21.1 in the EU Catalogue of Feed Materials.

Legal Disclaimer

Suggested feeding rates are produced as a guide only and many other factors may have an overriding effect on animal response; no performance guarantee can be given. Rations should be carefully balanced for energy and protein, contain sufficient forage to maintain rumen function and be fortified with an appropriate vitamin and mineral supplement. Animals must have constant access to clean water.



Whey permeate 35





%	35.0	Calcium	g/kg	2.80
%	0.20	Magnesium	g/kg	0.42
%	0.28	Phosphorus	g/kg	2.90
%	1.65	Potassium	g/kg	9.10
%	5.00	Salt	g/kg	12.5
%	0.00	Sodium	g/kg	5.25
%	3.50	Copper	mg/kg	2.10
MJ/kg DM	12.5	Manganese	mg/kg	5.25
%	0.00	Selenium	mg/kg	0.03
%	0.00	Zinc	mg/kg	9.50
%	28.0	Saturates	% of oil	70.0
		Monounsaturates	% of oil	25.0
		PUFAs	% of oil	5.00
		Long chain PUFAs	% of oil	0.00
	% % % % % % MJ/kg DM %	% 0.20 % 0.28 % 1.65 % 5.00 % 0.00 % 3.50 MJ/kg DM 12.5 % 0.00 % 0.00	% 0.20 Magnesium % 0.28 Phosphorus % 1.65 Potassium % 5.00 Salt % 0.00 Sodium % 3.50 Copper MJ/kg DM 12.5 Manganese % 0.00 Selenium % 0.00 Zinc % 28.0 Saturates Monounsaturates PUFAs	% 0.20 Magnesium g/kg % 0.28 Phosphorus g/kg % 1.65 Potassium g/kg % 5.00 Salt g/kg % 0.00 Sodium g/kg % 0.00 Sodium g/kg MJ/kg DM 12.5 Manganese mg/kg % 0.00 Selenium mg/kg % 0.00 Zinc mg/kg % 28.0 Saturates % of oil Monounsaturates % of oil PUFAs % of oil