

TMR Range Analysis

Analysis Product Code	(N) Immubooost Precalver (inc Bio-Mos) 1170	(N) Precalver Super 3522	(N) Precalver (Xtra Mag, VitE) 2817	(N) TMR Dairy Home Mix 3220	Buffer Dairy 3003	(N)Maize Beet 1301	(N) Intensive Beef 3098	(N) Intensive Beef+Yeastacc 3110
Calcium %	2	3	4	21.9	14.9	26.5	20	19
Phosphorous %	16	18	9.6	8.1	7	6	3	5
Sodium %	18.5	19	26	8	24	4.5	13	12.4
Magnesium %	4,000	4,000	4,000	3,000	3,300	2,400	2,000	2,000
Copper mg/kg	400	400	1,000	300	850	600	200	200
Bioplex Copper mg/kg	5,000	5,000	5,000	3,650	3,850	3,100	3,250	3,250
Zinc mg/kg	0	400	1,500	370	480	770	320	320
Bioplex Zinc mg/kg	4,500	2,000	3,000	3,700	2,700	3,000	2,600	2,600
Manganese mg/kg	700	700	700	550	730	437	412	412
Iodine mg/kg	100	120	180	60	77	56	70	70
Cobalt mg/kg	60	60	60	33	38	26	24	24
Selenium mg/kg	8	0	10	0	0	0	0	0
Selplex mg/kg	500,000	300,000	800,000	425,000	375,000	340,000	206,000	206,000
Vitamin A iu/kg	150,000	100,000	250,000	125,000	100,000	100,000	41,200	41,200
Vitamin D3 iu/kg	3,000	3,600	8,000	2,500	2,310	2,000	2,240	2,240
Vitamin E iu/kg	0	0	0	0	0	0	118	118
Vitamin B1 mg/kg	0	0	0	0	0	400	588	588
Vitamin B12 mcg/kg	0	0	0	0	0	0	0	0
Yeastacc TS cfu/kg	0	0	0	0	0	0	0	0
Sodium Bicarbonate %	0	0	0	5	0	7	35	34
Feeding Rates	100g	100g	100g	200g	(see note)	250g	30g/100kg LW	30g/100kg LW

Maximise farm profitability
Using
Nutribio's High Spec
TMR Mineral Range.

To ensure your mineral solution is balanced for a specific diet, forage analysis can be taken, for details please contact Nutribio's Solution Centre on (021) 4507303 or Pat O'Byrne (Nutritionist) on (087) 2519993.

For further details please contact your local Nutribio Representative

Keith Chambers	087 2534585	Commercial Manager
Enda Moran	086 8240808	South
Joe Sinnott	087 2535875	East
Ray Connolly	087 2590183	West
Raymond Irvine	0044 778 574 5646	North East
Trevor Adams	0044 778 665 2944	North West



Nutribio Ltd,
Tivoli Ind. Est.
Cork, Ireland
0214507303
www.nutribio.ie



Nutribio
Precision Nutrition

Revised: 11/03/2008



Nutribio's
Nutrition Solutions
Centre



Nutribio's
Premium Solutions
TMR Mineral Range





Nutribio Nutrition Solutions

Proper Dietary Vitamin and Mineral Formulation is of Importance for:

- Milk production, growth, reproduction and health
- Strong immune function
- Carbohydrate metabolism and energy transfer
- Protein synthesis

Unlock your Herd's Potential

Minerals and vitamins comprise only a small amount of the daily dietary intake, the proper balance and bioavailability is critical in maintaining herd health, liveweight gain, milk production and reproductive efficiency.

Minerals and vitamins must be supplemented as they cannot be synthesised by the animal, variables including dry matter intake fluctuations, feedstuff quality, mycotoxins, environmental stress and water quality, can have significant effects on mineral interaction and availability often causing imbalance. While mineral and vitamins are crucial to the animal, the same nutrients are required by the rumen microbes, which digest the food eaten by the animal.



Minerals Required by Dairy Cows & Dry Stock	
Macrominerals	Microminerals (trace)
Calcium	Cobalt
Phosphorous	Copper
Potassium	Iodine
Magnesium	Selenium
Sodium	Manganese
Chloride	Zinc
Sulphur	Iron

Balancing the forages

Forages as can be seen from **Table 1**, vary in their level of macrominerals, combining these forages calcium, sodium and magnesium requirements will be increased versus feeding grass silage on its own.

Table 1:

DM Basis		Grass Silage	Maize Silage
Calcium	Ca%	0.47 - 0.6	0.18 - 0.28
Phosphorous	P%	0.27 - 0.35	0.20 - 0.30
Potassium	K%	1.80 - 3.30	1.00 - 1.50
Magnesium	Mg%	0.14 - 0.20	0.10 - 0.15
Chloride	Cl%	1.23 - 1.75	0.40 - 0.50
Sodium	Na%	0.25 - 0.40	0.10 - 0.20
Sulphur	S%	0.20 - 0.28	0.05 - 0.10

Purchasing a dairy compound to balance a maize grass diet this compound will have minerals included at 3% to 3.25% feeding 8kgs will give 240 – 260 grams/cow/day, Purchasing a dairy compound to balance a grass silage, mineral inclusion will be 2.5% giving 200 grams/cow/day feeding 8kgs.

It is important that the calcium to phosphorous ratio be a minimum of 1.5:1 and a maximum of 2:1 in the total diet. Ensuring adequate calcium in the total diet of dairy cows is crucial for appetite and milk yield.

Both magnesium and sodium have an effect on buffering the diet which can result in a 10% to 15% increase in Dry Matter Intake. A percentage of the sodium needs to come from sodium bicarbonate.

Large variations in dietary intakes of trace elements and their antagonists can reduce the availability of these elements making it difficult to formulate diets to meet trace element requirements. One way to correct this is to use complex organic minerals or chelated sources. These have an enhanced bioavailability giving benefits in fertility and herd health.

Nutribio Nutrition Solutions

Can cater for your specific herd needs through our portfolio of mineral formulations to balance your forages for optimum performance.

1. NutribioTMR/ Home Mix

- Formulated for grass silage diets.

2. Nutribio Maize Beet –Dairy

- Formulated for maize silage and beet with grass silage.

Nutribio TMR/Home Mix and Nutribio Maize Beet are formulated based on forage analysis and research.

- Supply 0.65% to 0.75% Calcium and 0.4% to 0.5% Phosphorus in the dry matter of the total diet.
- Includes Sodium Bicarbonate to buffer the diet and maximise dry matter intake.
- Optimum levels of trace elements/vitamins.

3. Nutribio Intensive Beef

- Formulated for finishing cattle
- Formulated for use with corn silages, beet and grain.
- Balances these diets that are low in Calcium and Sodium.

4. Nutribio Fertility Buffer-

- Formulated for buffer feeding with grass or corn silages at grass.
- The mineral supplies magnesium to aid against grass tetany.
- Chelated trace elements to enhance fertility.
- Vitamins to balance the buffer and ensure adequate levels.

Feeding Rates	Kgs DM Buffer	Grams/Cow/Day
	2	120
	4	130
	6	150