

# **High Protein Concentrate Product Range**

The High Protein Concentrate (HPC) Range consists of various HPC's to meet clients' requirements. This range is formulated with high-quality raw materials for average to high milk production. Consult an AFGRI Animal Feeds Technical Advisor for recommendations.

### Advantages of the product:

- 1. The HPC product range is scientifically formulated.
- 2. The HPC product range contains no ruminant by-products and cannot contribute to diseases stemming from these by-products (Mad Cow disease etc.)
- The HPC product range contains the necessary vitamins and minerals for improved performance of dairy cows.
- Buffers, additional stock remedies and minerals, yeast cultures, enzymes, ionophores, etc. can be added to HPC products on request or prescription.

### General guidelines:

- Adaptation of cows is extremely important should the HPC be changed. Consult an AFGRI Animal Feeds Technical Advisor for the necessary recommendations.
- 2. Clean, fresh drinking water must be available at all times.
- 3. Cows must have access to shade as heat stress is detrimental to milk production.
- 4. The type and quality of roughage available has a major influence on the type and quantity of HPC and energy that cows should receive daily.
- 5. The higher the milk production per cow per day, the higher the margin above feed costs per cow per day will be.
- An optimal feeding system is important. Feed costs sometimes constitute 60% or more of the total costs of a dairy enterprise.
- 7. The feed intake should be monitored daily.

COMPOSITION				
Product	Dairy HPC 40	Dairy HPC 40 NPN Free	Dairy HPC 55	
Class:	Dair	y High Protein Conce	ntrate	
Registration Number:	V11837	V11836	V11835	
AFGRI Product Code:	R1111	R1112	R1113	
Nutrients	g/kg	g/kg	g/kg	
Crude Protein (min.)	400	400	550	
Crude Protein from NPN (max.)	39.46%	0	46.96%	
Urea (max.)	55	0	90	
Moisture (max.)	120	120	120	
Crude Fat (min.)	25	25	25	
Crude Fat (max.)	70	70	70	
Crude Fibre (max.)	130	130	130	
Calcium (min.)	25	27	36	
Calcium (max.)	35	35	40	
Phosphorus (min.)	8	8	11	





Applications				
	Dairy 15	Dairy 17	Dairy 19	Dairy 21
Ingredients	kg	kg	kg	kg
Dairy HPC 40	200	250	300	300
Dairy HPC 40 NPN Free			50	100
Maize meal <sup>1</sup>	750	670	700	600
Dicalcium Phosphate	5	3		
Total	955	923	1050	1000
Composition of Mix	g/kg	g/kg	g/kg	g/kg
Crude Protein (min.)	150	170	190	210
Crude protein from NPN (max.)	23.34%	25.15%	23.7%	22.6%
Urea (max.)	12.2	14.9	15.7	16.5
Moisture (max.)	120	120	120	120
Crude Fat (min.)	25	25	25	25
Crude Fat (max.)	70	70	70	70
Crude Fibre (max.)	90	90	90	90
Calcium (min.)	8	8	8	8
Calcium (max.)	12	12	12	12
Phosphorus (min.)	4	4	4	4





Applications					
	Dairy 15	Dairy 17	Dairy 19	Dairy 21	
Ingredients	kg	kg	kg	kg	
Dairy HPC 40 NPN Free	200	250	300	400	
Maize meal <sup>1</sup>	750	670	700	600	
Dicalcium Phosphate	5	3			
Total	955	923	1050	1000	
<sup>1</sup> Maize meal (8	<sup>1</sup> Maize meal (80g/kg protein on an as fed basis).				
Composition of Mix	g/kg	g/kg	g/kg	g/kg	
Crude Protein (min.)	150	170	190	210	
Urea (max.)	0	0	0	0	
Moisture (max.)	120	120	120	120	
Crude Fat (min.)	25	25	25	25	
Crude Fat (max.)	70	70	70	70	
Crude Fibre (max.)	120	120	120	120	
Calcium (min.)	8	8	8	8	
Calcium (max.)	13	13	13	13	
Phosphorus (min.)	4	4	4	4	

	<b>Applications</b>			
	Dairy 17	Dairy 19	Dairy 21	
Ingredients	kg	kg	kg	
Dairy HPC 55	200	240	280	
Maize meal <sup>1</sup>	800	760	720	
Total	1000	1000	1000	
<ul> <li><sup>1</sup>Maize meal (80g/kg protein on an as fed basis).</li> <li><sup>2</sup>Wheat Bran (155g/kg protein on an as fed basis.)</li> </ul>				
Composition of Mix	g/kg	g/kg	g/kg	
Crude Protein (min.)	1 <i>7</i> 0	190	210	
Equiv. Crude Protein from NPN	30.39%	32.63%	34.44%	
Urea (max.)	18	21.6	25.2	
Moisture (max.)	120	120	120	
Crude Fat (min.)	25	25	25	
Crude Fat (max.)	75	75	75	
Crude Fibre (max.)	90	90	90	
Calcium (min.)	8	8	8	
Calcium (max.)	15	15	15	
Phosphorus (min.)	5	5	5	



COMPOSITION				
PRODUCT	RODUCT Dairy HPC 32 Scientific Bovine 21% Maize Free Concentrate		Midi-Mel 23% Maize Free Concentrate	
Class:	Dair	y High Protein Concer	trate	
Registration Number:	V14149	V23279	V23284	
AFGRI Product Code:	R1110	R1128	R1129	
Nutrients	g/kg	g/kg	g/kg	
Crude Protein (min.)	320	300	330	
Crude Protein from NPN (max.)	26.91%	20.00%	17.39%	
Urea (max.)	30	20	20	
Moisture (max.)	120	120	120	
Crude Fat (min.)	25	25	25	
Crude Fat (max.)	70	80	80	
Crude Fibre (max.)	130	160	160	
Calcium (min.)	20	20	20	
Calcium (max.)	22	22	22	
Phosphorus (min.)	7.6	7	7	

## **FEEDING INSTRUCTIONS**

- Adaptation of animals is important when changing from a NPN-free dairy meal to a dairy meal which contains NPN (eg. urea). It is advisable to use a 50/50 mixture of the two types of meal over a period of 4-6 days in order to facilitate adaption.
- It is recommended that the dairy meal be fed in at least 2-4 meals per day.
- This dairy meal should not be fed indiscriminately together with other NPN containing feeds. Consult an AFGRI Animal Feeds Technical Advisor for recommendations.
- Protect the feed against rain. Urea is water soluble and animals drinking such a solution could be poisoned.
- Vinegar is an effective remedy against NPN poisoning. Treatment: Mix with an equal amount of water and dose half a bottle per calf or large sheep and 2 to 4 bottles per head of cattle (1 bottle = 750ml).

Applications					
	Dairy 17	Dairy 20	Dairy 21	Dairy 23	
Ingredients	kg	kg	kg	kg	
Dairy HPC 32	400	500			
Scientific Bovine 21% Maize Free HPC			600		
Midi-Mel 23% Maize Free HPC				600	
Maize meal <sup>1</sup>	600	500	400	400	
Total	1000	1000	1000	1000	
1 M	aize meal (80g/kg p	protein on an as fed ba	sis).		
Composition of Mix	g/kg	g/kg	g/kg	g/kg	
Crude Protein (min.)	170	200	210	230	
Crude Protein from NPN (max.)	20.26%	21.53%	15.99%	14.97%	
Urea (max.)	12	15	11. <i>7</i>	12	
Moisture (max.)	120	120	120	120	
Crude Fat (min.)	25	25	25	25	
Crude Fat (max.)	70	70	75	75	
Crude Fibre (max.)	90	90	90	90	
Calcium (min.)	8	8	8	10	
Calcium (max.)	12	12	12	14	
Phosphorus (min.)	4	4	4	5	

Consult an AFGRI Animal Feeds Technical Advisor for correct use and recommendations with other raw materials.

# FEEDING RECOMMENDATIONS

The quantity of dairy feed fed per animal will depend on:

- The quality and availability of grazing and/or roughage.
- The stage of lactation.
- · Milk and milk solids production.

Form: Mash or Pellets

Packages: Bulk or 40 kg Bags

# **WARNING**

This farm feed contains a NPN source and registered stock remedies.

Feed strictly according to instructions.

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