

**FOUR ARROWS ETHANOL PTY LTD: Estimates of feed product required for dairy cattle**



INDICATIVE RATIONS		Details of some typical rations by class of livestock in Kg of DM per animal per day						Total DM
		DDG	Grain	Silage	Cotton seed	Molasses	Sundries	
Milkers		6.00	5.00	6.20	2.00	0.50	0.30	20.00
Dry cows		3.00	1.50	4.80	0.50	0.20	1.00	11.00
Calves	bull	0.50	0.00	1.00	0.10	0.05	0.10	1.75
	heifer	0.50	0.00	1.00	0.10	0.05	0.10	1.75
Heifers	3 to 9 mths	1.50	0.00	2.00	0.20	0.10	0.20	4.00
	9 to 15 mths	2.00	0.70	3.00	0.20	0.10	0.40	6.40
	15 to 20mths	3.00	1.00	6.00	0.30	0.20	0.50	11.00
	first calf 20 to 22 mths	3.00	1.50	4.80	0.50	0.20	1.00	11.00

CATTLE NUMBERS		
Milkers		6,000
Dry cows		1,200
Calves	bull	178
	heifer	1,599
Heifers	3 to 9 mths	2,942
	9 to 15 mths	2,824
	15 to 20 mths	1,666
	first calf 20 to 22 mths	775
		<u>17,184</u>

PRODUCTS CONSUMED		Details of possible rations by class of livestock in tonnes of dry matter per class of cattle per day						Total DM
		DDG	Grain	Silage	Cotton seed	Molasses	Sundries	
Milkers		36.00	30.00	37.20	12.00	3.00	1.80	120.00
Dry cows		3.60	1.80	5.76	0.60	0.24	1.20	13.20
Calves	bull	0.09	0.00	0.18	0.02	0.01	0.02	0.31
	heifer	0.80	0.00	1.60	0.16	0.08	0.16	2.80
Heifers	3 to 9 mths	4.41	0.00	5.88	0.59	0.29	0.59	11.77
	9 to 15 mths	5.65	1.98	8.47	0.56	0.28	1.13	18.08
	15 to 20 mths	5.00	1.67	10.00	0.50	0.33	0.83	18.33
	first calf 20 to 22 mths	2.32	1.16	3.72	0.39	0.15	0.77	8.52
Total tonnes DM per day		57.87	36.61	72.81	14.82	4.39	6.50	193.01
Typical moisture content		88%	10%	70%	10%	0%	0%	
Total tonnes product per day		482.28	40.67	242.70	16.46	4.39	6.50	249.70
Total tonnes product per year		176,033	14,846	88,587	6,010	1,604	2,374	289,453

USEFUL CALCULATIONS		
<b>Water in DG</b>		
	0.42 ML	
above	12% moisture	
<b>Storage volumes</b>		
grain	20,619 m3	
@	0.72 tonnes/m3	
silage	134,223 m3	
	0.66 tonnes/m3	
<b>Truck loads</b>		
DG	7,041 loads	
@	25.00 tonnes/load	
=	19.29 per day	
grain	594 loads	
@	25.00 tonnes/load	
=	1.63 per day	
silage	4,429 loads	
@	20.00 tonnes/load	
=	12.14 per day	

**Notes :**  
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