

# SPECIFICATIONS



**Animal Nutrition**

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Standard Analysis	% DM
Moisture	9.1
Dry Matter	90.9
Nitrogen	13.2
Crude Protein	82.7
Soluble Protein	30.0
Ammonia	–
NDIP	8.6
ADIP	8.6
Crude Fiber	2.6
ADF	2.8
NDF	4.6
Lignin	0.7
Total VFA	–
Lactic	–
Acetic	–
Sugar	1.7
Starch	0.8
Soluble Fiber	2.3
NFC	4.8

Protein Bioavailability	% DM
RUP % CP	88.77
RUPd % RUP	88.15
dRUP % DM	64.67
dRUP-Lys % DM	5.36
dRUP-Met % DM	0.62
dRUP-His % DM	4.42
dRUP-EAA % DM	35.7

Macro Mineral	% DM
Ash	4.7
Calcium	0.9
Phosphorus	0.5
Magnesium	0.1
Potassium	0.6
Sulfur	0.6
Sodium	0.3
Chloride	0.3

Trace Mineral	ppm
Iron	1,604
Manganese	8
Zinc	40
Copper	6

Fatty Acids	% DM
Fat	3.1
TFA	3.0
Glycerol	0.0
Pigment	0.0
C12:0	0.0
C14:0	0.0
C16:0	0.7
C16:1	0.0
C18:0	0.1
C18:1T	0.0
C18:1C	0.8
C18:2	1.3
C18:3	1.0
Other	0.1
Fat Type	2.0
Lipolysis Rate	193.4

Pool	% DM	Rate	Int dig
CHO A1	–	0.0	0.1
CHO A4	1.7	0.0	2
CHO B1	0.8	0.0	193.4
CHO B2	2.3	0.0	–
CHO B3	4.6	0.7	1.7
CHO C	1.7	0.0	0.8
PRO A1	–	0.1	2.3
PRO A2	30.0	1.5	4.6
PRO B1	44.1	1.2	1.7
PRO B2	–	–	–
PRO C	0.08	0.0	27.8

Amino Acids	Product		Model Specifications <sup>1</sup>	
	% DM	% of CP	% DM	% of CP
Arginine	3.31	4.01	3.28	3.97
Cysteine	0.77	0.93	0.96	0.84
Histidine	5.38	6.51	5.65	6.84
Isoleucine	0.94	1.14	0.72	0.87
Leucine	11.31	13.68	11.47	13.88
Lysine	6.40	7.74	6.84	8.28
Methionine	0.85	1.03	0.79	0.96
Phenylalanine	5.53	6.69	5.69	6.89
Threonine	3.01	3.64	3.13	3.78
Tryptophan	0.99	1.19	1.02	1.23
Valine	6.69	8.10	7.03	8.50
EAA	44.40	53.72	45.62	55.2

<sup>1</sup>When a feed component of a dairy ration consists of a blend of feed ingredients differing in rumen undegradable protein and/or post-ruminal protein digestibility, the amino acids of the resulting mixture differ in their ruminal degradability and post-ruminal digestibility. Most ration formulation software allow only a single, common set of parameters to characterize ruminal degradability and post-ruminal digestibility of all essential amino acids; one cannot enter parameters specific to each amino acid. Therefore, entering the amino acid profile of the whole protein of a feed mixture results in erroneous values of its metabolizable amino acid content. To circumvent this problem, users should use the 'model specifications' amino acid values in software such as CNCPS/NASEM so that the correct supply of each metabolizable amino acid is calculated correctly.