

# **SPECIFICATIONS**

**CONTRACT RT11-2016**

**SUPPLY AND DELIVERY OF ANIMAL FEED**

**PERIOD: 1 OCTOBER 2016 TO 30 SEPTEMBER 2019**

**DOG FOOD**

**DEPARTMENT OF CORRECTIONAL  
SERVICES, SOUTH AFRICAN POLICE  
SERVICES, ETC**

<b>FOOD TYPE</b>	<b>PAGE</b>
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## **SPECIFICATION FOR DOG FOOD**

1.1 Chemical analyses must be supplied for the items tendered for.

See appendix for the list of chemical analyses to be conducted  
THE APPLICANT FOR THE TENDER MUST SUPPLY RAW MATERIAL  
INCLUSION LEVELS IN THEIR ORDER OF INCLUSION IN THE FINAL MIX  
FROM THE HIGHEST TO THE LOWEST.

They must also state the source of the raw material that is used in the  
manufacture of the food

**ITEM CODE 10121801-0001**

1.1 Chemical analyses must be supplied for the items tendered for.

See appendix for the list of chemical analyses to be conducted  
THE APPLICANT FOR THE TENDER MUST SUPPLY RAW MATERIAL  
INCLUSION LEVELS IN THEIR ORDER OF INCLUSION IN THE FINAL MIX  
FROM HIGHEST TO THE LOWEST.

They must also state the source of the raw material that is used in the  
manufacture of the feed

**MAINTENANCE DOG FOOD**

“As Is” Minimum      “As Is” Maximum

<b>g/kg</b>			
	Moisture		100
	CP	200	220
	Lysine	6.5	
	Arginine	7	
	Methionine + cystine	5	
	Histidine	2.5	
	Isoleucine	4.5	
	Leucine	7.0	
	Phenylalanine-tyrosine	8.3	
	Threonine	6.5	
	Tryptophan	1.8	
	Valine	4.6	
	Fat	50	80
	Linolenic Acid	15	25
	Fibre	25	35
	Ash	50	80
	P	6	
	Ca	10	16

	Potassium	6	
	Sodium	0.5	
	Chloride	0.8	
	Magnesium	0.4	
	Ca : Phos Ratio	1.1 : 1.0	2 : 1.0
<b>iu/kg</b>	Vitamin A	5 000	400 000
	Vitamin E	30	
	Vitamin D	500	5 000
<b>mg/kg</b>	Thiamine B1	1	40
	Niacin	11	11
	Riboflavin	4.5	
	I	0.7	
	Fe	50	140
	Cu	4	17
	Mn	5	40
	Zn	120	1 000
	Se	0.11	0.2
	Pantothenic acid	10	
	Pyridoxine	1	
	Folic acid	180	
	Vitamin B12	22	
	Choline	1200	

**ITEM CODE 10121801-0002**

1.1 Chemical analyses must be supplied for the items tendered for.

See appendix for the list of chemical analyses to be conducted  
THE APPLICANT FOR THE TENDER MUST SUPPLY RAW MATERIAL  
INCLUSION LEVELS IN THEIR ORDER OF INCLUSION IN THE FINAL MIX  
FROM HIGHEST TO THE LOWEST.

They must also state the source of the raw material that is used in the  
manufacture of the feed

**SMALL BREED PUPPY FOOD**

**“As Is” Minimum      “As Is” Maximum**

<b>g/kg</b>			
	Moisture		100
	CP	250	280
	Lysine	8	
	Arginine	10	
	Methionine + cystine	5	
	Histidine	2.8	
	Tryptophan	2.5	
	Isoleucine	5.4	
	Leucine	8.8	
	Phenylalanine-tyrosine	10.8	
	Valine	5.8	
	Fat	70	120
	Linolenic Acid	15	25
	Fibre	25	35
	Ash	60	80
	P	9	
	Ca	9	16
	K	6	

	Na	0.7	
	Cl	1	
	Mg	0.4	
	Ca : Phos ratio	1.1 : 1.0	1.5 : 1.0
<b>iu/kg</b>	Vitamin A	5 000	15 000
	Vitamin D	550	1 000
	Vitamin E	50	
<b>mg/kg</b>	Thiamine B1	1	50
	Niacin	11	1 000
	I	0.7	
	Riboflavin	4.5	
	Fe	80	140
	Cu	7.5	17
	Mn	5	40
	Zn	120	500
	Pantothenic acid	10	
	Pyridoxine	1	
	Folic acid	180	
	Vitamin B12	22	
	Choline	1200	
	Se	0.11	0.2

**ITEM CODE 10121801-0003**

1.1 Chemical analyses must be supplied for the items tendered for.

See appendix for the list of chemical analyses to be conducted  
THE APPLICANT FOR THE TENDER MUST SUPPLY RAW MATERIAL  
INCLUSION LEVELS IN THEIR ORDER OF INCLUSION IN THE FINAL MIX  
FROM HIGHEST TO THE LOWEST.

They must also state the source of the raw material that is used in the  
manufacture of the feed

**LARGE BREED PUPPY FOOD**

“As Is” Minimum      “As Is” Maximum

<b>g/kg</b>			
	Moisture		100
	CP	250	280
	Lysine	8	
	Arginine	10	
	Methionine + cystine	6	
	Histidine	3	
	Isoleucine	6	
	Leucine	9	
	Phenylalanine-tyrosine	11	
	Threonine	7	
	Valine	6	
	Tryptophan	2.5	
	Fat	70	140
	Linolenic Acid	15	25
	Fibre	25	35
	Ash	60	80
	P	9	
	K	6	



	Na	0.7	
	Cl	1	
	Mg	0.4	
	Ca	12	16
	Ca : Phos ratio	1.1 : 1.0	1.5 : 1.0
<b>iu/kg</b>	Vitamin A	5 000	15 000
	Vitamin D	550	1 000
	Vitamin E	50	
<b>mg/kg</b>	Thiamine B1	1	50
	Riboflavin	4.5	
	Pantothenic acid	10	
	Pyridoxine	1	
	Niacin	11	500
	Folic acid	180	
	Vitamin B12	22	
	Choline	1200	
	Cu	7.5	17
	Mn	5	40
	Zn	120	500
	Se	0.11	0.2
	I	1.5	
	Fe	80	140

**ITEM CODE 10121801-0004**

**HIGH ENERGY WORKING DOG FOOD**

THE APPLICANT FOR THE TENDER MUST SUPPLY RAW MATERIAL INCLUSION LEVELS IN THEIR ORDER OF INCLUSION IN THE FINAL MIX FROM HIGHEST TO THE LOWEST.

They must also state the source of the raw material that is used in the manufacture of the feed

**1. SPECIFICATION**

Nutrient	Unit	ADULT HIGH ENERGY	
		Min	Max
<b>MACRO</b>			
Moisture	g/kg		100
Crude Protein	g/kg	220	250
Crude Fat	g/kg	120	140
Crude Fibre	g/kg	25	35
Crude Ash	g/kg	70	80
<b>FATTY ACIDS</b>			
Linoleic acid	g/kg	22	26
<b>ESSENTIAL AMINO ACIDS</b>			
Methionine- Cystine	g/kg	9	
Lysine	g/kg	9	
Tryptophan	g/kg	2.5	
Phenylalanine- tyrosine	g/kg	11	
Histidine	g/kg	3	
Isoleucine	g/kg	6	
Leucine	g/kg	9	

Threonine	g/kg	7	
Valine	g/kg	6	
Arginine	g/kg	11	
<b>MINERALS</b>			
Calcium	g/kg	11	16
Phosphorus	g/kg	9	
Ca: Phos ratio		1.1 : 1.0	1.5 : 1.0
Magnesium	g/kg	0.4	
Sodium	g/kg	0.8	
Potassium	g/kg	6	
Zinc	mg/kg	120	1000
Iron	mg/kg	80	180
Copper	mg/kg	8	17
Selenium	mg/kg	0.2	
Manganese	mg/kg	6	40
Iodine	mg/kg	1.5	50
Chloride	mg/kg	1	
Fe	mg/kg	80	3000
<b>VITAMINS</b>			
Vitamin A	IU/kg	10000	15000
Vitamin D	IU/kg	1000	1500
Thiamine B1	mg/kg	2	40
Niacin	mg/kg	15	1000
Vitamin B12	mg/kg	22	
Vitamin E	IU/kg	50	
Riboflavin	mg/kg	4.5	
Pantothenic acid	mg/kg	10	
Pyridoxine	mg/kg	1	
Folic acid	mg/kg	180	
Choline	mg/kg	1200	

**HYPO-ALLERGENIC DIET FOR SKIN + GASTRO-INTESTINAL DISORDERS IN DOGS****ITEM CODE 10121801-0005: SUPPLY AND DELIVERY OF ANIMAL FOOD**

		“As is” Min	“As is” Max
<b>%</b>	MOISTURE		8,0%
	CRUDE PROTEIN		28,0%
	LYSINE	1,31%	
	ARGININE	1,65%	
	METHIONINE + CYSTINE	1,06%	
	LINOLEIC ACID	3,1%	
	FIBRE	2,8%	
	DIETARY FIBRE	6.3 %	
	FAT	18,0%	
	OMEGA 3	0,81 %	
	OMEGA 6	3,31 %	
	ASH	5,5%	
	Ca	0,8%	
	POTASSIUM	0,6%	
	SODIUM	0,35%	
	CHLORIDE	0,7%	
MAGNESIUM	0,07%		
<b>iu/ kg</b>	VITAMIN A	18 000	
	VITAMIN E	600	
	VITAMIN D	1000	
<b>mg/kg</b>	THIAMINE B1	5,1	
	NIACIN	10,2	
	RIBOFLAVIN	2,6	
	I	3,45	
	Fe	200	
	Cu	22,0	
	Mn	0,07	
	Zn	227	
	Se	0,3	
	PANTOTHENIC ACID	27,4	
	PYROXIDENE	26,1	
	FOLIC ACID	10,9	
	VITAMIN B12	0,05	
	CHOLINE	2500	

**NOTE 1** : PRODUCT TO BE FREE OF ARTIFICIAL FLAVOURANTS AND COLOURING**NOTE 2** : NOVEL PROTEIN SOURCES TO BE UTILIZED TO ENSURE HYPO-ALLERGENIC PROTEINS

**LIGHT (LOW CALORIE) WEIGHT LOSS DIET FOR DOGS****ITEM CODE 10121801-0006: SUPPLY AND DELIVERY OF ANIMAL FOOD**

		<b>“As is” Min</b>	<b>“As is” Max</b>
<b>%</b>	MOISTURE		9,5%
	CRUDE PROTEIN		27%
	METABOLISABLE ENERGY (CALCULATED AS PER NRC85) (kcal/kg)		3207,0
	METABOLISABLE ENERGY (MEASURED) (kcal/kg)		3207,0
	LYSINE	1,06%	
	ARGININE	1,33%	
	METHIONINE + CYSTINE	1,06%	
	LINOCEIC ACID	2,07%	
	FIBRE	8,8%	
	FAT	11,0%	
	ASH	5,8%	
	Ca	0,08%	
	POTASSIUM	0,6%	
	SODIUM	0,35%	
	CHLORIDE	0,7%	
	MAGNESIUM	0,07%	
<b>iu/ kg</b>	VITAMIN A	25 000	
	VITAMIN E	500	
	VITAMIN D	1 000	
<b>mg/kg</b>	THIAMINE B1	3,9	
	NIACIN	14,2	
	RIBOFLAVIN	3,6	
	I	3,1	
	Fe	180	
	Cu	15	
	Mn	68,0	
	Zn	212,0	
	Se	0,3	
	PANTOTHENIC ACID	33,0	
	PYROXIDENE	26,1	
	FOLIC ACID	9,0	
	VITAMIN B12	0,05	
	CHOLINE	1100	

## **LIST OF CHEMICAL ANALYSES TO BE CONDUCTED PER FOOD TYPE**

1. This must be accompanied by the vitamin and mineral premix specification used in the manufacture of food.

<b>Nutrient</b>
<b>Moisture</b>
<b>Crude Protein</b>
<b>Crude Fat</b>
<b>Crude Fibre</b>
<b>Crude Ash</b>
<b>FATTY ACIDS</b>
<b>Linoleic acid</b>
<b>ESSENTIAL AMINO ACIDS</b>
<b>Methionine- Cystine</b>
<b>Lysine</b>
<b>Tryptophan</b>
<b>Phenylalaniine- tyrosine</b>
<b>Histidine</b>
<b>Isoleucine</b>
<b>Leucine</b>
<b>Threonine</b>
<b>Valine</b>
<b>Arginine</b>
<b>MINERALS</b>
<b>Calcium</b>
<b>Phosphorus</b>
<b>Ca:Phos ratio</b>
<b>Magnesium</b>
<b>Sodium</b>
<b>Potassium</b>
<b>Zinc</b>

<b>Iron</b>
<b>Copper</b>
<b>Selenium</b>
<b>Manganese</b>
<b>Iodine</b>
<b>Chloride</b>

**The vitamin and mineral premix specification used for the manufacture of dog food must be submitted**

## RT11-2016 : HORSE FEED SPECIFICATIONS

In a facility where animal feeds are manufactured a qualified employee(s) shall be designated as the person responsible for feed formulations and such a person shall be registered in terms of the Natural Scientific Professions Act , 2003 (Act no 27 of 2003) as an animal scientist.

<b>MINIMUM VITAMIN AND MINERAL LEVELS (AS FED)</b>			
<b>VITAMIN</b>	<b>MATURE WORKING HORSES</b>	<b>LACTATING MARES &amp; FOALS</b>	
Vitamin A	5000	10000	IU/kg
Vitamin D3	550	1000	IU/kg
Vitamin E	100	150	mg/kg
Vitamin K3	1	2	mg/kg
Vitamin B1	10	7	mg/kg
Vitamin B2	5	6	mg/kg
Vitamin B6	3	5	mg/kg
Vitamin B12	0.04	0.05	mg/kg
Niacin	10	12.5	mg/kg
Pantothenic acid	5	8	mg/kg
Folic acid	4	7	mg/kg
Biotin	0.2	0.2	mg/kg
Choline	100	150	mg/kg
Magnesium	0.75	1	g/kg
Iron	65	80	mg/kg
Copper	15	20	mg/kg
Manganese	65	65	mg/kg
Zinc	65	65	mg/kg
Iodine	0.5	0.5	mg/kg
Selenium	0.15	0.15	mg/kg
Cobalt	0.08	0.08	mg/kg



## RT11-2016 : HORSE FEED SPECIFICATIONS

### SPECIFICATIONS: COMPLETE HORSE FEED FOR MATURE WORKING HORSES

10121500-0001

NUTRIENT	MIN	MAX	UNIT
MOISTURE		120	g/kg
CRUDE PROTEIN	100		g/kg
LYSINE	4.2		g/kg
CRUDE FIBRE	150	250	g/kg
ETHER EXTRACT	25		g/kg
CALCIUM	6	10	g/kg
PHOSPHOROUS	3		g/kg
Ca: P RATIO	1.5:1.0	1.8:1.0	
SODIUM	3	4	g/kg
DIGESTIBLE ENERGY	10		MJ/kg

RAW MATERIALS			
LUCERNE 1ST GRADE	15	25	%
CRUSHED MAIZE	15	25	%
WHEAT BRAN	10	15	%
OATS	5	8	%
MOLASSES	5	8	%

**RT11-2016 : HORSE FEED SPECIFICATIONS**

**SPECIFICATIONS: COMPLETE HORSE FEED FOR LACTATING MARES AND FOALS**

**10121500-0002**

<b>NUTRIENT</b>	<b>MIN</b>	<b>MAX</b>	<b>UNIT</b>
MOISTURE		120	g/kg
CRUDE PROTEIN	140		g/kg
LYSINE	7.5		g/kg
CRUDE FIBRE	150	250	g/kg
ETHER EXTRACT	25		g/kg
CALCIUM	8	12	g/kg
PHOSPHOROUS	5		g/kg
Ca: P RATIO	1.5:1.0	1.8:1.0	
SODIUM	3	4	g/kg
DIGESTIBLE ENERGY	10		MJ/kg

<b>RAW MATERIALS</b>			
LUCERNE 1ST GRADE	15	25	%
CRUSHED MAIZE	15	25	%
WHEAT BRAN	10	15	%
OATS	5	8	%
MOLASSES	5	8	%