PRODUCTION LICKS

These supplements are provided in situations where additional performance above maintenance is required. The composition of production licks varies depending on the production purpose, the type of animal and the quality of the available grazing. **NB:** These licks may be given during any season of the year.

a) Production licks for cattle, sheep, goats & game in the summer and/or on fertilised pastures

Spring/Summer production			
Item	**Fertilized pastures**	**Natural green pastures**	**Natural pastures** *(Game) + 50 kg lucerne*
Maize-meal	750	700	700
Oilcake	250	200	150
Feed Grade Urea	-	25	25
Kimtrafos 12 Grandé/PhosSure 12	75	100	75
Kalori 3000	50	25	50
Feed Grade Sulphur	5	5	2
Salt	200	200	250
Total	**1330**	**1255**	**1305**
Composition			
Crude protein (%)	12.0	16.4	15.1
From NPN (%)	-	37.0	39.0
ME (MJ/kg)	9.5	9.0	8.8
Ca (%)	1.6	2.1	1.7
P (%)	1.0	1.3	1.0
S (%)	0.5	0.5	0.2
Intake, g/kg BW*/day (cattle)	**800-1000**	**1000-1500**	**-**
Intake, g/kg BW*/day (sheep & goats)	**150-200**	**120-150**	**-**
Intake, g/kg BW*/day (game)	**-**	**2.5 – 3.0**	**1.8**

* BW = Body weight

Supplemented under the following situations:

- Growth of calves/lambs on summer and cultivated pastures.
- Feed to cattle or sheep/goats that have free access to grazing and/or roughage.

Regulate Intakes. Depending on intakes, salt inclusion may be adjusted accordingly.

b) Winter and summer production licks with specific production objectives

	Winter production		Summer production
Item	**Growth**	**Lactating**	**Growth**
Maize-meal	300	200	700
Oilcake	400	400	200
Feed Grade Urea	50	75	75
Kimtrafos 12 Grandé/PhosSure 12	75	75	100
Kalori 3000	25	25	25
Feed Grade Sulphur	3	5	5
Salt	200	250	200
Total	**1053**	**1030**	**1305**
Composition			
Crude protein (%)	30.6	37.4	26.8
From NPN (%)	47.4	58.1	63.7
ME (MJ/kg)	7.9	6.9	8.6
Ca (%)	1.9	2.0	2.0
P (%)	1.3	1.3	1.2
S (%)	0.3	0.5	0.5
Intake, g/ day (cattle)	**1000 - 2000**	**800 - 1200**	**800 - 1200**
Intake, g/ day (sheep & goats)	**100 - 150**	**100 - 150**	**150 - 200**

Supplemented under the following situations:

- Where rapid weight gain on summer grazing is required.
- In winter for beef cows or sheep with calves/lambs.
- Flushing before mating.

Feed to cattle or sheep/goats that have free access to grazing and/or roughage.

Regulate Intakes. Depending on intakes, salt inclusion may be adjusted accordingly.

WARNING: These licks contain urea. Hungry animals must not have access to urea containing licks. Gradually introduce them to the lick until it is ensured that the recommended intake will not be exceeded.

c) Production lick for wool growth

General

- The nutritional status of the sheep influences the quality of the wool fibre.
- The feeding level of the ewe during pregnancy influences the wool production ability of the lamb. The nutrition of the pregnant wool-producing ewe is therefore critical.
- Sufficient levels of energy and protein are essential for sustained high wool production.
- Sulphur supplementation combined with urea in a lick is essential for the formation of sulphur-containing amino acids in wool.

Wool production lick

Item:	kg/mixture	Analysis
Maize-meal	400	ME = 8.04 MJ/kg
Cotton-seed oilcake	250	CP = 28.8%
Fish meal	50	NPN (% of CP) = 55.2%
Feed Grade Urea	50	Ca = 2.1%
Kimtrafos 12 Grandé/PhosSure 12	75	P = 1.3%
Feed Grade Sulphur	4	S = 0.5%
Kalori 3000	25	
Salt	200	
Total	**1054**	
Intake, g /day (sheep/goats)	**150 - 200**	

Feed to sheep that have free access to grazing and/or roughage.

Regulate Intakes. Depending on intakes, salt inclusion may be adjusted accordingly.

WARNING: These licks contain urea. Hungry animals must not have access to urea containing licks. Gradually introduce them to the lick until it is ensured that the recommended intake will not be exceeded.

d) Production lick for late pregnant and lactating ewes on dry grazing / low quality roughage

Item:	kg/mixture:	Analysis
Grounded maize/Hominy chop/Small Grains	300	ME = 8.614 MJ/kg
Cotton-seed oilcake	400	CP = 33%
Salt	150	Ca = 1.7%
Feed Grade Urea	50	P = 0.8%
Kimtrafos 12 Grandé/PhosSure 12	25	
Feed Lime	20	
Kalori 3000	50	
Feed Grade Sulphur	3	
Total	**998**	
Intake, g /day (Late pregnant ewes)	**180 - 200**	
Intake, g /day (Lactating ewes)	**250 - 300**	

e) Production lick for flushing of cows and ewes

Sheep

The purpose of flushing in sheep is to obtain optimal ovulation tempo in ewes which could result in an increased lamb percentage (increased % of multiplets).

The purpose of flushing is not to rectify existing problems. Ewes in a poor condition (< 2 condition count) or ewes that are too fat (> 3 condition count) will not benefit from flushing.

It is recommended that flushing commences 3 weeks prior to mating.

Cattle

The purpose of flushing in cattle is to that the condition of the beef cow is improved to such an extend that she will be able to re-conceive within 3 months after calving.

During late lactation and early pregnancy the cow's nutritional needs are low and condition may even be lost. Nutrition is however, essential during late pregnancy and early lactation with a view to

- giving birth to a strong calf
- producing sufficient milk for the calf
- resuming regular heat periods within 3 months after calving and re-conception within that period — the ideal is that a cow should calve with a condition count of 3.5 to 4.

The following lick is recommended for flushing:

Raw materials	**Kg/mixture**	**Analysis of lick**
Maize-meal	550	ME = 7.8 MJ
Cotton-seed oilcake	150	CP = 27.8 %
Feed Grade Urea	75	NPN = 61.2 %
Kimtrafos 12 Grandé/PhosSure 12	75	Ca = 1.9 %
Feed Grade Sulphur	5	P = 1.0 %
Kalori 3000	50	S = 0.5 %
Salt	250	
TOTAL	**1155**	
Intake (Sheep)	**100-200g/day**	
Intake) (Cattle)	**800-1200g/day**	

It is not always necessary to mix a lick especially for flushing. If available, rested camps (natural and cultivated), good quality legume pastures (plus energy/ mineral lick) and grain stubble fields, can also be used for flushing.