

MINISTRY OF AGRICULTURE & FISHERIES

Livestock Research and Improvement Unit

MOLASSES UREA BLOCKS

What is Molasses Urea Block?

Molasses Urea Block (MUB) is a supplemental feed for ruminants that promote the growth of rumen microbes throughout the day with a constant source of fermentable nitrogen.





ingredients for the right includes the process			
Ingredients	Percentage (%)	Weight (kg)	
Molasses	50	12 1/2	
Urea	5	1 1/4	
Mineral Mix& Salt	5	1 ½(5/8 kg each)	
Quick Lime	10	2 1/2	
Wheat Middlings	15	3 ¾	
Rice Bran	15	3 3/4	

- Quick lime or cement: used as a binder/ hardener
- > Fillers : wheat middlings, general purpose concentrate Equipment
 - Mixing pan (half drum)
 - Fire place and wood
 - Paddle
 - Goggles
 - Mask
 - Moulds(wooden frames, plastic buckets or PVC pipe)
 - Lining for moulds (paper bag, feed bag, old newspaper)
 - Goggles and mask should be worn by the person mixing and pouring the ingredients

Hot Method- Quick Lime as the binder

Hot method produces harder blocks:

- Weigh all the ingredients
- Line moulds
- ► Heat molasses and bring to a simmer (85°C)
- Uniformly reduce heat or remove pan from fire
- Add urea to the hot molasses and stir vigorously until dissolved.
- Add in salt and stir until dissolved
- Add in the quick lime and mix to a uniform consistency (allow foam to settle) then stir mixture.
- Add the filler and mix to a uniform consistency
- Pour into moulds and compact.



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Ingredients for a 25 Kg Molasses –Urea Block

Ingredients	Percentage (%)	Weight (kg)
Molasses	50	12 1/2
Urea	5	1 1/4
Mineral Mix& Salt	5	1 1/4(5/8 kg each)
Quick Lime	10	2 1/2
Wheat Middlings	15	3 3/4
Rice Bran	15	3 3/4

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