

**UK Beef IRM Mineral Recommendations**  
**(free-choice supplements for grazing beef cattle)**

Date: March, 2010

<i>Level</i>	<i>Basic Cow-Calf Mineral<sup>1</sup></i>	<i>High Magnesium Mineral<sup>2</sup></i>	<i>Stocker Mineral with Monensin<sup>3</sup></i>
Salt, %	22 - 25	15	24.5
Mg, % (from MgO)	2	14 <sup>4</sup>	0.15
Ca, % (minimum)	11	11.5	9
Ca, % (maximum)	12	13	10.5
P, %	4.0	6.0	6
K, %	0.5	0.1	0.8
S, % (maximum)	1.0	1.0	0.8
Cu, ppm <sup>5</sup>	1,600	1,400	1,500
Zn, ppm	3,200	3,000	3,000
Se, ppm <sup>6</sup> (See below)	35	26	35
I, ppm	65	50	60
Co, ppm	15	10	15
Manganese, ppm	5,000	3,700	3,000
Fe (iron) Added <sup>7</sup>	None	None	None
Vit A, IU/lb	250,000	200,000	300,000
Vit E, IU/lb	250	200	250
Monensin, grams/Ton <sup>8</sup>	None	None	1,620
Nutritional adequacy based on intake (oz/hd/day)	3	4	3

<sup>1</sup>Distillers dried grains (40 lb/ton), wet molasses (20 lb/ton), and mineral oil (20 lb/ton).

<sup>2</sup>Distillers dried grains (100 lb/ton), wet molasses (20 lb/ton), and mineral oil (20 lb/ton). To be fed when conditions for grass tetany exist. Formulated for cows during pre- and early lactation.

<sup>3</sup>Contains Monocalcium phosphate 29.49%, Dried cane molasses 20%, Ground limestone 13.75%, cane molasses 3%, Distillers dried grains 5%, Mineral oil 1%.

<sup>4</sup>~~Minimum one third of magnesium oxide in the prilled form.~~ All magnesium shall be from magnesium oxide. No other forms of magnesium shall be used such as dolomitic limestone or magnesium mica.

<sup>5</sup>Minimum one-fourth of copper in an "organic" (chelate, proteinate, etc.) form. No copper oxide shall be used.

<sup>6</sup>Minimum of 33.3% of selenium shall come from selenium yeast (Sel-Plex<sup>®</sup>). Three oz. supplement intake at 35 ppm or 4 oz. intake at 26 ppm equals 3 mg of selenium per head daily.

<sup>7</sup>No iron oxide for coloring.

<sup>8</sup>Three oz. supplement intake equals 152 mg of Monensin per head daily.

**NOTES:**

If an additional ingredient is needed to meet the 2,000 lb formula, we specify distillers dried grains with solubles.

These products are not recommended for sheep, goats or Jersey cattle due to potential copper toxicity.

Please note, the University of Kentucky has formulated these recommendations specifically for otherwise healthy cattle based upon National Research Council (NRC) guidelines for animal requirements, average forage analyses in Kentucky and research on mineral availability in forages. Actual forage levels may vary. If you have any concerns about the health or special needs of your herd, you should contact the Extension Service or your veterinarian. While the University provides these recommendations based upon currently available data, it assumes no responsibility for any errors on the part of the supplier or producer, including but not limited to mixing, handling, or other formulation errors.