## 1510.0416 CONTROLLED RELEASE PLANT NUTRIENTS.

- Subpart 1. **Prohibited statement on label.** A fertilizer label may not bear a statement that connotes or implies that certain plant nutrients contained in the fertilizer are released slowly over a period of time, unless the controlled release components are identified and guaranteed at a level of at least 15 percent of the total guarantee for that nutrient.
- Subp. 2. **Permitted labels.** The following types of plant nutrients may be labeled as controlled release plant nutrients:
- A. water insoluble nitrogen products, such as natural organics, ureaform materials, urea formaldehyde products, isobutylidene diurea, and oxamide;
- B. coated controlled release plant nutrients such as sulfur coated urea and other encapsulated soluble fertilizers;
- C. occluded controlled release plant nutrients, such as fertilizers mixed with waxes, resins or other inert materials and formed into particles; and
- D. products containing water soluble nitrogen such as ureaform materials, urea formaldehyde products, methylenediurea (MDU), dimethylenetriurea (DMTU), and dicyanodiamide (DCD).
- Subp. 3. **Descriptive terms.** "Controlled release" is the preferred term, however the terms "water insoluble," "coated slow release," "slow release," "controlled release," "slowly available water soluble," and "occluded slow release" are accepted as descriptive of these products, provided that the manufacturer can show a testing program approved by the department substantiating the claim.
  - Subp. 4. [Repealed, 19 SR 2485]
  - Subp. 5. [Repealed, 19 SR 2485]
- Subp. 6. **Methods.** Until more appropriate methods are developed, Association of Official Analytical Chemists (AOAC) International method number 970.04 (15th Edition), or the appropriate AOAC International method in a subsequent edition, must be used to confirm the coated controlled release and occluded controlled release plant nutrients and others whose slow release characteristics depend on particle size. AOAC International method number 945.01 (15th Edition), or the appropriate AOAC International method in a subsequent edition, must be used to determine the water insoluble nitrogen of organic materials.
  - Subp. 7. [Repealed, 19 SR 2485]
  - Subp. 8. [Repealed, 19 SR 2485]
- Subp. 9. Acceptable guaranteed analysis breakdown for coated controlled release or occluded controlled release nutrients. When nutrients in a fertilizer are coated, or

occluded to obtain controlled release properties, then the guarantees for those components must be shown as footnotes rather than as a component following each nutrient as indicated in items A to C.

Α	Α	fertilizer	with	one coated	material
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	Fertkote 10-15-20	
	Guaranteed Analysis	
	Total Nitrogen (N)	10%
	2.5% Ammoniacal Nitrogen	
	2.5% Nitrate Nitrogen	
	5.0% Urea Nitrogen*	
	Available Phosphate (P <sub>2</sub> O <sub>5</sub> )	15%
	Soluble Potash (K <sub>2</sub> O)	20%
	Sulfur (S)	14%
	Plant nutrients derived from:	
	*% Controlled release urea nitrogen from	
B.	A fertilizer with all materials of one nutrient coated.	
	Fertkote 10-15-20	
	Guaranteed Analysis	
	Total Nitrogen (N)*	10%
	2.5% Ammoniacal Nitrogen	
	2.5% Nitrate Nitrogen	
	5.0% Urea Nitrogen	
	Available Phosphate (P <sub>2</sub> O <sub>5</sub> )	15%
	Soluble Potash (K <sub>2</sub> O)	20%
	Sulfur (S)	14%
	Plant nutrients derived from:	
	*% Controlled release nitrogen from	

C. A fertilizer with two or more nutrients from coated materials.

Fertkote 10-15-20
Guaranteed Analysis

Total Nitrogen (N)\* 2.5% Ammoniacal Nitrogen 2.5% Nitrate Nitrogen 5.0% Urea Nitrogen

Available Phosphate  $(P_2O_5)^*$ Soluble Potash  $(K_2O)^*$ Sulfur (S)

Plant nutrients derived from:

\* The nitrogen, phosphate, and potash materials in this product have been coated to provide 9.0 percent coated controlled release nitrogen (N), 13 percent coated controlled release available phosphate ( $P_2O_5$ ), and 18 percent coated controlled release soluble potash ( $K_2O$ ).

Subp. 10. Acceptable guaranteed analysis breakdown for slowly available water soluble nitrogen. If a fertilizer material or fertilizer mixture contains recognized and determinable forms of water soluble nitrogen with controlled release properties, the guarantees for those components, if claimed, must be shown as footnotes rather than as a component in the nitrogen breakdown, as indicated in items A and B.

A.

Slow Fertilizer 20-0-0
Guaranteed Analysis

Total Nitrogen (N) 20%

8.0% Urea Nitrogen
2.0% Other Water Soluble Nitrogen
2.9% Slowly Available Water Soluble Nitrogen\*
7.1% Water Insoluble Nitrogen

Plant nutrients derived from:

\* Controlled release nitrogen from

OR

B.

Slow Fertilizer 20-0-0 Guaranteed Analysis

Total Nitrogen (N)

20%

8.0% Urea Nitrogen4.9% Other Water Soluble Nitrogen\*7.1% Water Insoluble Nitrogen

Plant nutrients derived from:

\*\_\_\_% Controlled release nitrogen from \_\_\_\_\_

Note: If other recognized forms of water soluble nitrogens are listed in the nitrogen breakdown, the term "other" must precede the "water soluble nitrogen\*" footnoted breakdown. The word "organic" may be used in the nitrogen breakdown where appropriate.

**Statutory Authority:** MS s 17.725; 18C.121

**History:** 19 SR 2485

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