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Sale and Distribution of Fertilizers

Sec. 22-111j-1. Definitions

Except as the Commissioner of Agriculture designates otherwise in specific cases, the names and definitions for commercial fertilizers shall be those adopted by the Association of American Plant Food Control Officials.

(Effective August 9, 1979)

Sec. 22-111j-2. Percentages

The term "percentage" by symbol or word, when used on a fertilizer label shall represent only the amount of individual plant nutrients in relation to the total product by weight.

(Effective August 9, 1979)

Sec. 22-111j-3. Labels

(a) When requested by the Commissioner of Agriculture, each manufacturer or distributor shall furnish, with his application for registration, all proposed labels for fertilizer and any directions for the use of such fertilizer.

(b) All guaranteed plant nutrients in addition to, and following, the primary nutrients of nitrogen, phosphorous and potassium, shall be listed on each label of fertilizer in the order in which such elements appear in section 22-111-4 of these regulations.

(c) Any fertilizer which contains a minimum of 0.03% of boron in water soluble form shall carry the word "warning" or "caution" which shall be conspicuously displayed on such label. Such label shall list the crop or crops for which said fertilizer shall be used and shall state that the use of such fertilizer on any non-recommended crop may cause serious injury to such crop or crops.

(d) Any fertilizer which contains a minimum of 0.001% molybdenum shall carry the word "warning" or "caution" which shall be conspicuously displayed on such label. Such label shall state that the application of any fertilizer containing molybdenum may result in a level of molybdenum in forage crops which may be toxic to ruminant animals.

(Effective August 9, 1979)

Sec. 22-111j-4. Plant nutrients

All plant nutrients which are to be used in the production, manufacture, and distribution of fertilizer shall be registered with the Commissioner of Agriculture and shall be guaranteed by the manufacturer or distributor. Said guarantees shall be established on an elemental basis as prescribed by statute. All sources of such elements, so guaranteed, and proof of the availability of such elements shall be provided to the Commissioner upon his request. The minimum percentage which shall be acceptable to the Commissioner for registration are as follows: calcium (CA), 1.000%; magnesium (MG), 0.5000%; sulfur (S), 1.000%; boron (B), 0.0200%; chlorine (CL), 0.1000%; cobalt (CO), 0.0005%; copper (CU), 0.0500%; iron (FE), 0.1000%; manganese (MN), 0.0500%; molybdenum (MO), 0.0005%; sodium (NA), 0.1000%; zinc (ZN), 0.0500%.

(Effective August 9, 1979)

Sec. 22-111j-5. Investigational allowances

(a) A commercial fertilizer, or any individual element contained therein, shall be deemed deficient if the analysis of nutrient is below the guarantee by an amount exceeding the values in the schedule below. Such guaranteed analysis shall be

conducted in accordance with the recommended Association of Official Analytical Chemists (A.O.A.C.) procedures for obtaining samples and sample preparation. Such procedures are described in Official Methods of Analysis of the Association of Official Analytical Chemists, 11th edition, 1970, and in succeeding issues of the Journal of the Association of Official Analytical Chemists. Replicate data shall be evaluated by following the instructions listed in the Journal of the Association of Official Analytical Chemists, vol. 59, no. 5, pg. 935, table 19, October 1966.

<i>Guarantee Percent</i>	<i>Nitrogen Percent</i>	<i>Available Phosphoric Acid, Percent</i>	<i>Potash Percent</i>
04	0.49	0.67	0.41
05	0.51	0.67	0.43
06	0.52	0.67	0.47
07	0.54	0.68	0.53
08	0.55	0.68	0.60
09	0.57	0.68	0.65
10	0.58	0.69	0.70
12	0.61	0.69	0.79
14	0.63	0.70	0.87
16	0.67	0.70	0.94
18	0.70	0.71	1.01
20	0.73	0.72	1.08
22	0.75	0.72	1.15
24	0.78	0.73	1.21
26	0.81	0.73	1.27
28	0.83	0.74	1.33
30	0.86	0.75	1.39
32	0.88	0.76	1.44

(b) Secondary and minor elements shall be deemed deficient if any element is below the guarantee by an amount exceeding the values in the table below. The maximum allowable deviation of the values listed in such tables shall be one unit (1%).

<i>Element</i>	<i>Allowable Deficiency</i>
Calcium	0.2 unit + 5% of guarantee
Magnesium	0.2 unit + 5% of guarantee
Sulfur	0.2 unit + 5% of guarantee
Boron	0.003 unit + 15% of guarantee
Cobalt	0.0001 unit + 30% of guarantee
Molybdenum	0.0001 unit + 30% of guarantee
Chlorine	0.005 unit + 10% of guarantee
Copper	0.005 unit + 10% of guarantee
Iron	0.005 unit + 10% of guarantee
Manganese	0.005 unit + 10% of guarantee
Sodium	0.005 unit + 10% of guarantee
Zinc	0.005 unit + 10% of guarantee

(c) Method of determining investigational allowances. A minimum of two (2) values shall be averaged in order to determine that the minimum guarantee has been met. If more than two (2) values are obtained, all significant values shall be averaged.

Each value may be “rounded” to one decimal place for easy recording, but each value shall be carried to two (2) decimal places in order to apply such established averages to the preceding table. If the requisite guarantee is not listed in such table, the necessary appropriate value shall be calculated by interpolation.

(d) Sampling. Wherever applicable, all sampling equipment used and procedures employed shall be those adopted by the Association of Official Analytical Chemists.
(Effective August 9, 1979)