

330 CMR 15.00: COMMERCIAL FERTILIZER AND LIME

Section

- 15.01: Definitions
- 15.02: License
- 15.03: Fertilizer Labeling
- 15.04: Agricultural Lime Labeling
- 15.05: Inspection Fees
- 15.06: Investigational Allowances and Penalties

15.01: Definitions

Agricultural Liming Material means a product whose calcium and magnesium compounds are capable of neutralizing soil acidity.

Brand means the term, designation, trademark, product name or other specific designation under which individual agricultural liming material is offered for sale.

Burnt Lime means a material made from limestone which consists essentially of calcium oxide or a combination of calcium oxide with magnesium oxide.

Calcium Carbonate Equivalent or "CCE" means the acid neutralizing capacity of an agricultural liming material expressed as weight percentage of calcium carbonate. CCE shall be determined by methods prescribed by the Association of Official Analytical Chemists.

Effective Neutralizing Value or "ENV" is the relative value using the calcium oxide content, magnesium oxide content and fineness to express the effectiveness of a limestone in neutralizing soil acidity. The term is synonymous with effective neutralizing power (ENP).

Fineness means the percentage by weight of the material which will pass U.S. Standard sieves of specific sizes.

Hydrated Lime means a material, made from burnt lime, which consists predominantly of calcium hydroxide or a combination of calcium hydroxide with magnesium oxide and/or magnesium hydroxide.

Industrial By-Product means any industrial waste or by-product containing calcium or calcium and magnesium in forms that will neutralize soil acidity.

Limestone means a material consisting essentially of calcium carbonate or a combination of calcium carbonate with magnesium carbonate capable of neutralizing soil acidity.

Marl means a granular or loosely consolidated earthy material composed largely of sea shell fragments and calcium carbonate.

Shells means a product obtained by grinding the shells of mollusks.

15.02: License

(1) No person shall manufacture or distribute in the commonwealth any type of fertilizer, except specialty fertilizers, without a license issued by the Department to the person whose labelling is applied to the fertilizer.

(2) No person shall distribute in the commonwealth a specialty fertilizer, soil conditioner or agricultural liming material until it is registered with the Department by the manufacturer or distributor.

15.03: Fertilizer Labeling

(1) All fertilizer labels shall contain the following information in a readable and conspicuous form. This information shall either appear on the front or back of the package, occupy at least the upper third of a side of the package, or be printed on a tag and attached to the package. For bulk products, this same information shall be delivered in printed form to the purchaser at the time of delivery:

- (a) Net weight
- (b) Brand
- (c) Grade (except when no primary nutrients are claimed)
- (d) Guaranteed Analysis: percentages shall be shown before the name of the element, and in the following format:
 - 1. Total Nitrogen (N) _____%
 - 2. _____% Ammoniacal Nitrogen
 - 3. _____% Nitrate Nitrogen
 - 4. _____% Water Insoluble Nitrogen
 - 5. _____% Urea Nitrogen
 - 6. _____% Other recognized and determinable forms of nitrogen
 - 7. Available Phosphate (P205) _____%
 - 8. Soluble Potash (K20) _____%
 - 9. Other nutrients as provided for in 330 CMR 15.02(3)
- (e) Sources of nutrients, when shown on the label, shall be listed below the completed guaranteed analysis statement.
- (f) Name and address of registrant or licensee.

(2) Plant nutrients other than nitrogen, phosphorous and potassium, when mentioned on the label shall be guaranteed on an elemental basis. Sources of the elements guaranteed and proof of availability shall be provided to the Department upon request. The minimum percentages which will be allowed for registration are as follows:

<u>Element</u>	<u>Minimum Percentage</u>
Calcium	1.00
Magnesium	0.50
Sulfur	1.00
Boron	0.02
Chlorine	0.10
Cobalt	0.0005
Copper	0.05
Iron	0.10
Manganese	0.05
Molybdenum	0.0005
Sodium	0.10
Zinc	0.05

(3) Any of the above listed elements which are guaranteed shall appear in the order listed above and immediately following guarantees for nitrogen, phosphorus and potassium. Proposed labels and directions for use of the fertilizer shall be furnished with the application for registration upon request.

(4) No fertilizer label shall bear a statement which implies that certain plant nutrients contained in a fertilizer are released slowly over a period of time, unless the slow release components are identified and guaranteed at a level of at least 15% of the total guarantee for that nutrient. 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 substantiating the claim. The following types of products may be labeled with slow release properties;

- (a) water insoluble, such as natural organics, ureaform materials, urea-formaldehyde products, isobutylidene diurea, oxamide, etc;
- (b) coated slow release, such as sulfur coated urea and other encapsulated soluble fertilizers;

15.03: continued

- (c) occluded slow release, where fertilizers or fertilizer materials are 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, dimethylenetriurea, dicyanodiabide, etc.

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

(6) When a plant nutrient guarantee is broken down into the component forms, the percentage for each component shall be shown before the name of the form.

EXAMPLE: Total Nitrogen (N)... ____ %
 ____ % Ammoniacal Nitrogen
 ____ % Nitrate Nitrogen

15.04: Agricultural Lime Labeling

(1) All agricultural lime materials sold, offered or exposed for sale shall have a label affixed to each package in a conspicuous manner on the outside thereof, a plainly printed, stamped or otherwise marked label, tag of statement, or in the case of bulk sales, a delivery slip, which contains the following information:

- (a) Name and principal office address of the manufacturer or distributor;
- (b) Brand or trade name of the material;
- (c) The identification of the product as to the type of the agricultural liming material, such as limestone, hydrated lime, burnt lime, industrial byproduct, marl and shells;
- (d) Net weight;
- (e) The minimum percentage of calcium oxide and magnesium oxide and/or calcium carbonate and magnesium carbonate shall be expressed in the following form: Total Calcium (Ca) ____%. Total Magnesium (Mg) ____%.
- (f) The minimum calcium carbonate equivalent (CCE) of agricultural liming material that is subject of the label. Calcium Carbonate Equivalent shall be determined by methods prescribed by the Association of Official Analytical Chemists.
- (g) The classification of the fineness of the agricultural liming material that is subject of the label. The minimum percentages by weight of that agricultural liming material which will pass through United States Standard 20, 60 and 100 sieves shall also appear on the label.
- (h) The classifications of the fineness of agricultural liming material, as set forth in this section, are the minimum percentages by weight which shall be able to pass through various sizes of United States Standard sieves to earn a particular classification:

<u>Classification</u>	<u>Sieve Size Minimums</u>
Fine-sized	95% through a 20 mesh sieve 60% through a 60 mesh sieve 50% through a 100 mesh sieve
Medium-sided	90% through a 20 mesh sieve 50% through a 60 mesh sieve 30% through a 100 mesh sieve
Coarse-sized	80% through a 20 mesh sieve. 20% through a 100 mesh sieve.

- (i) The minimum ENV of the agricultural liming material that is subject to the label.
- (j) ENV shall be calculated using the following formula: (% by weight passing 20 mesh sieve - % passing 60 mesh sieve) x 0.4 = A; (% by weight passing 60 mesh sieve - % passing 100 mesh sieve) x 0.8 = B; (% by weight passing 100 mesh sieve) x 1.0 = C (A + B + C) x Calcium Carbonate Equivalent divided by 100 = ENV
- (k) The maximum percentage by weight of the moisture content of the agricultural liming material that is subject to the label. The actual moisture content of the agricultural liming material shall be no more than 10% greater than the percentage by weight of the moisture content expressed on the label.

330 CMR: DEPARTMENT OF AGRICULTURAL RESOURCES

15.04: continued

(1) The information required under 330 CMR 15.04(1)(e), (f), (i), and (j), (relating to elemental calcium and magnesium; CCE; and ENV) shall appear on the label under the heading "Guaranteed Dry Weight Analysis." The guaranteed dry weight analysis on a label shall be deemed deficient if testing of the agricultural liming material that is subject of the label shows that the actual analysis falls below the guaranteed dry weight analysis and any allowed tolerance with respect to any representation required to be set forth on the label by M.G.L. c. 128 or 330 CMR 15.00.

(2) Tolerances.

(a) A tolerance of 2% of the guaranteed minimum shall be allowed with respect to guaranteed minimum CCE and minimum fineness.

(b) A tolerance of 10% of the guarantee shall be allowed with respect to any other analysis required to be set forth on a label by 330 CMR 15.00.

15.05: Inspection Fees

(1) An inspection fee of 0.15 cents per ton, minimum of \$5.00, shall be paid to the Department for all commercial fertilizers and soil conditioners distributed in the commonwealth on a semiannual basis.

(2) This fee shall not apply to sales to manufacturers or exchanges between manufacturers on individual packages of commercial fertilizer or soil conditioners of ten pounds or less.

15.06: Investigational Allowances and Penalties

(1) A commercial fertilizer shall be deemed deficient if the analysis of any nutrient is below the guarantee by an amount exceeding the following values in 330 CMR 15.06(1) Table I, or if the overall index value of the fertilizer is below 98%:

TABLE 1

Guarantee percent	Nitrogen percent	Available Phosphoric Acid percent	Potash percent
4.00 or less	0.49	0.67	0.41
5.00	0.51	0.67	0.43
6.00	0.52	0.67	0.47
7.00	0.54	0.68	0.53
8.00	0.55	0.68	0.60
9.00	0.57	0.68	0.65
10.00	0.58	0.69	0.70
12.00	0.61	0.69	0.79
14.00	0.63	0.70	0.87
16.00	0.67	0.70	0.94
18.00	0.70	0.71	1.01
20.00	0.73	0.72	1.08
22.00	0.75	0.72	1.15
24.00	0.78	0.73	1.21
26.00	0.81	0.73	1.27
28.00	0.83	0.74	1.33
30.00	0.86	0.75	1.39
32.00 or more	0.88	0.76	1.44

15.06: continued

(2) Secondary and minor elements shall be deemed deficient if any element is below the guarantee by an amount exceeding the values in the following schedule, 330 CMR 15.06(2) Table 2:

TABLE 2

<u>Element</u>	<u>Allowable Deficiency</u>
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

The Maximum allowance when calculated in accordance to 330 CMR 15.06(2)Table 2 shall be 1 unit (1%).

(3) For guarantees not listed in 330 CMR 15.06 Tables 1 or 2, the deficiency will be calculated using the same formula by interpolation.

(4) The overall index value shall be calculated by comparing the commercial value guaranteed with the commercial value found.

(5) A penalty of two times the commercial value of the deficiencies shall be assessed and paid to the consumer of the fertilizer within three months after the date of the assessment. If the consumer can not be found, the assessment shall be paid to the Commonwealth. The amount of the unit values of nutrients shall be set by the Department on a regular basis after surveying fertilizer prices in the Commonwealth, and a written list of the current unit values shall be maintained by the Department.

REGULATORY AUTHORITY

330 CMR 15.00: M.G..L. c. 128, §§ 71 through 82.