

**CHAPTER 73. FERTILIZERS**

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**Authority**

The provisions of this Chapter 73 issued under the Pennsylvania Fertilizer Soil Conditioner and Plant Growth Substance Law (3 P. S. §§ 68.1—68.23), unless otherwise noted.

**Source**

The provisions of this Chapter 73 adopted July 28, 1972, effective July 29, 1972, 2 Pa.B. 1435, unless otherwise noted.

**§ 73.1. Definitions.**

The following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise:

*Act*—The Pennsylvania Fertilizer, Soil Conditioner and Plant Growth Substance Law (3 P. S. §§ 68.1—68.23).

*Primary plant nutrient*—A fertilizer component consisting of nitrogen, phosphorus and potassium compounds.

*Secondary plant nutrient*—A fertilizer nutrient component other than primary plant nutrients.

**Source**

The provisions of this § 73.1 adopted July 28, 1972, effective July 29, 1972, 2 Pa.B. 1435.

**§ 73.2. Fertilizer terms, names and definitions.**

(a) The fertilizer terms used shall be those contained in the current edition of the *Official Publication of the Association of American Plant Food Control Officials, Inc.*

(b) Except as the Secretary 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.

**Source**

The provisions of this § 73.2 adopted July 28, 1972, effective July 29, 1972, 2 Pa.B. 1435.

**§ 73.3. Secondary plant nutrients.**

(a) A plant nutrient other than nitrogen, phosphorus and potassium, if mentioned in any form or manner, shall be registered and shall be guaranteed on the elemental basis. Sources of the elements guaranteed and proof of availability shall be submitted to the Secretary upon request.

(b) The minimum percentages of nutrients which will be accepted for registration are shown in the following table:

| <i>Element</i>  | <i>Percent</i> |
|-----------------|----------------|
| Calcium (Ca)    | 1.00           |
| Magnesium (Mg)  | 0.50           |
| Sulfur (S)      | 1.00           |
| Boron (B)       | 0.02           |
| Chlorine (Cl)   | 0.10           |
| Cobalt (Co)     | 0.0005         |
| Copper (Cu)     | 0.05           |
| Iron (Fe)       | 0.10           |
| Manganese (Mn)  | 0.05           |
| Molybdenum (Mo) | 0.0005         |
| Sodium (Na)     | 0.10           |
| Zinc (Zn)       | 0.05           |

(c) The guarantee or claim for the plant nutrients listed in subsection (b) and immediately following the guarantees for the primary plant nutrients.

(e) A proposed label and direction for use of the fertilizer shall be furnished with the application for registration.

**Source**

The provisions of this § 73.3 adopted July 28, 1972, effective July 29, 1972, 2 Pa.B. 1435.

**§ 73.4. Warning statements.**

(a) A warning statement is required on the label for a product which contains .03% or more of boron in a water-soluble form. The statement shall contain the following:

- (1) The word warning in a conspicuous manner.
- (2) The crops for which the fertilizer is to be used.
- (3) A warning that the use of the fertilizer on crops other than those recommended may result in serious injury to the crops.

(b) Products containing .001% or more of molybdenum require a warning statement on the label. The statement shall contain the following:

- (1) The word warning.

(2) A warning that the application of fertilizers containing molybdenum may result in forage crops containing levels of molybdenum which are toxic to grazing animals.

**Source**

The provisions of this § 73.4 adopted July 28, 1972, effective July 29, 1972, 2 Pa.B. 1435.

**§ 73.5. Specialty fertilizer labels.**

The following information shall appear in a readable and conspicuous form and shall occupy at least the upper 1/3 of one side of the container:

- (1) Net weight.
- (2) Brand name.
- (3) Grade.
- (4) Guaranteed analysis, as follows:
  - (i) The percentage of total nitrogen.
  - (ii) The percentage of ammoniacal nitrogen, of claimed.
  - (iii) The percentage of water-insoluble nitrogen, if claimed or the statement “organic” or “slow-acting” nitrogen on the label.
  - (iv) The percentage of available phosphoric acid.
  - (v) The percentage of soluble potash.
  - (vi) Additional plant nutrients.
  - (vii) Potential acidity or alkalinity, the percentage or pounds of calcium carbonate equivalent per ton of claimed.
- (5) Name and address of registrant.

**Source**

The provisions of this § 73.5 adopted July 28, 1972, effective July 29, 1972, 2 Pa.B. 1435.

**§ 73.6. Slowly available plant nutrients.**

- (a) No fertilizer label may bear a statement that implies the presence of a slowly available plant nutrient unless the nutrient is identified on the label.
- (b) If a fertilizer label implies that nitrogen is slowly available, for example, organic nitrogen, the guaranteed analysis shall indicate the percentage of water-insoluble nitrogen in the material.
- (c) If the label states the amount of organic nitrogen present in a phrase such as “25% of the nitrogen from ureaformaldehyde (Ureaform),” the water-insoluble nitrogen guarantee may be not less than 60% of the nitrogen so designated.
- (d) If the water-insoluble nitrogen is less than 15% of the total nitrogen, the label may not bear designations such as “organic,” “ureaform” or similar terms.

(e) The phrases “coated-slow release fertilizer” and “coated-slow releast” are acceptable descriptive terms for products for which a testing program has substantiated the claim. Water-insoluble nitrogen shall be guaranteed at 15% of the total nitrogen level for slow release materials.

(f) The Association of Official Analytical Chemists Test Method as prescribed in *Methods of Analysis* shall be used to substantiate the presence of slow release materials. It is permissible to eliminate grinding during sample preparation.

**Source**

The provisions of this § 73.6 adopted July 28, 1972, effective July 29, 1972, 2 Pa.B. 1435; amended February 9, 1979, effective February 10, 1979, 9 Pa.B. 498. Immediately preceding text appears at serial page (6734).

**§ 73.7. Percentage.**

The term “percentages,” by symbol or word if used on a fertilizer label, shall be deemed to represent only the amount of individual plant nutrients or other factors in relation to the total product by weight.

**Source**

The provisions of this § 73.7 adopted July 28, 1972, effective July 29, 1972, 2 Pa.B. 1435.

**§ 73.8. Investigational allowances or tolerances.**

(a) A commercial fertilizer shall be deemed deficient if the analysis of any nutrient is below the guarantee by an amount exceeding the values in the following schedule:

| <i>Guarantee<br/>percent</i> | <i>Nitrogen<br/>percent</i> | <i>Available phosphoric<br/>acid percent</i> | <i>Potash<br/>percent</i> |
|------------------------------|-----------------------------|--|---------------------------|
| 4 or less                    | .49                         | .67  | .41                       |
| 5                            | .51                         | .67  | .43                       |
| 6                            | .52                         | .67  | .47                       |
| 7                            | .54                         | .68  | .53                       |
| 8                            | .55                         | .68  | .60                       |
| 9                            | .57                         | .68  | .65                       |
| 10                           | .58                         | .69  | .70                       |
| 12                           | .61                         | .69  | .79                       |
| 14                           | .63                         | .70  | .87                       |
| 16                           | .67                         | .70  | .94                       |
| 18                           | .70                         | .71  | 1.01                      |
| 20                           | .73                         | .72  | 1.08                      |
| 22                           | .75                         | .72  | 1.15                      |
| 24                           | .78                         | .73  | 1.21                      |

| <i>Guarantee<br/>percent</i> | <i>Nitrogen<br/>percent</i> | <i>Available phosphoric<br/>acid percent</i> | <i>Potash<br/>percent</i> |
|------------------------------|-----------------------------|--|---------------------------|
| 26                           | .81                         | .73  | 1.27                      |
| 28                           | .83                         | .74  | 1.33                      |
| 30                           | .86                         | .75  | 1.39                      |
| 32 or more                   | .88                         | .76  | 1.44                      |

(b) For guarantees not listed in the table set forth in subsection (a), the appropriate value shall be calculated by interpolation.

(c) For the investigational allowances listed in subsection (a) to be applicable, the Association of Official Analytical Chemists procedures for obtaining samples, sample preparation and analysis shall be used. The procedures are described in *Methods of Analysis*, published by the Association of Official Analytical Chemists.

(d) The sampling equipment and procedures shall be those adopted by the Association of Official Analytical Chemists wherever applicable.

(e) The practice of averaging at least two values shall be adhered to. If more than two values are obtained, all significant values shall be averaged. Values carried to two decimals shall be used in applying averages to this table. Values shall be rounded to one place in reporting.

(f) Secondary and micronutrient elements shall be deemed deficient if any element is below the guarantee by an amount exceeding the values in the following table:

| <i>Element</i> | <i>Allowable Deficiency</i>   |
|----------------|-------------------------------|
| Calcium        | .2 unit + 5% of guarantee     |
| Magnesium      | .2 unit + 5% of guarantee     |
| Sulfur         | .2 unit + 5% of guarantee     |
| Boron          | .003 unit + 15% of guarantee  |
| Cobalt         | .0001 unit + 30% of guarantee |
| Molybdenum     | .0001 unit + 30% of guarantee |
| Chlorine       | .005 unit + 10% of guarantee  |
| Copper         | .005 unit + 10% of guarantee  |
| Iron           | .005 unit + 10% of guarantee  |
| Manganese      | .005 unit + 10% of guarantee  |
| Sodium         | .005 unit + 10% of guarantee  |
| Zinc           | .005 unit + 10% of guarantee  |

(g) The maximum allowance when calculated in accordance with subsection (f) shall be one unit, 1%.

**Source**

The provisions of this § 73.8 adopted July 28, 1972, effective July 29, 1972, 2 Pa.B. 1435; amended February 9, 1979, effective February 10, 1979, 9 Pa.B. 498. Immediately preceding text appears at serial pages (6734) and (6735).

**Notes of Decisions**

It was not necessary for the Department to establish where a particular fertilizer deficiency actually occurred but only to establish by substantial evidence that the fertilizer manufactured was deficient in its guaranteed nutrient components. *Willard Agri-Service, Inc. v. Department of Agriculture*, 554 A.2d 596 (Pa. Cmwlth. 1989).

The procedures adopted by the Association of Official Analytical Chemists (AOAC) and utilized by the Department for obtaining samples, sample preparation and analysis were adequate. *Willard Agri-Service, Inc. v. Department of Agriculture*, 554 A.2d 596 (Pa. Cmwlth. 1989).

**§ 73.9. Computation of tonnages.**

In determining tonnages for payment of the inspection fee, the tonnages of all fillers added to dry fertilizers and of water added to liquid fertilizers shall be included.

**Source**

The provisions of this § 73.9 adopted July 28, 1972, effective July 29, 1972, 2 Pa.B. 1435.

**§ 73.10. Labeling.**

No person may distribute in this Commonwealth any type of fertilizer in bulk unless the bulk distribution container is properly labeled with all of the following information:

- (1) The name and address of the licensee or registrant.
- (2) The name of the product.
- (3) The guaranteed analysis showing the percentage of plant food claimed, in the following format:
  - (i) The percentage of total nitrogen.
  - (ii) The percentage of a available phosphoric acid.
  - (iii) The percentage of soluble potash.
  - (iv) The percentage of secondary and micronutrient elements.

**Source**

The provisions of this § 73.10 adopted July 28, 1972, effective July 29, 1972, 2 Pa.B. 1435.

**§ 73.11. Reports.**

The fertilizer tonnage reports required under section 11 of the act (3 P. S. § 68.11) shall be rendered in the format specified by Computer Reporting Procedures in the Uniform Fertilizer Tonnage Reporting System, Association of American Plant Food Control Officials, Inc., whether the semiannual reporting system or the invoice reporting system is used. If a licensee does not have electronic data processing equipment, a typewritten or a legibly handwritten report in the prescribed format may be used.

**Source**

The provisions of this § 73.11 adopted July 28, 1972, effective July 29, 1972, 2 Pa.B. 1435.

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(260918) No. 302 Jan. 00

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