

STATEMENTS OF UNIFORM INTERPRETATION AND POLICY

1. Grade - The grade of a fertilizer shall be used by the registrant/licensee in the labeling and by the control official in his reports and publications. No numeral shall be used in the grade of a fertilizer except those referring to Total Nitrogen (N), Available Phosphate (P_2O_5) and Soluble Potash (K_2O). (Official 1993)
2. Nutrient Guarantee - All fertilizer nutrients, with the exception of phosphate (P_2O_5) and potash (K_2O) if guaranteed, shall be stated in terms of the elements. (Official 1993)
3. Name of Fertilizer Material- When the name of a single fertilizer material is used as part of the brand name of a fertilizer, as for example, blood, bone or fish, the guaranteed nutrients associated with that material shall be derived from or supplied entirely by the material named. A fertilizer material may be supplemented with additional nutrients other than those supplied by the named material if (1) the source of the nutrient supplement is identified and (2) the label gives notice that the fertilizer material contains added nutrients. Words such as "enriched", "supplemented" or "fortified" shall be used as part of the brand name to indicate that additional nutrients have been added to the fertilizer material. For example: "Bone Meal enriched with Iron." When a fertilizer material is diluted with non-nutritive fillers, then the name of the diluent shall appear in the brand name in letters no less than one-half the size of the letters of the fertilizer material. For example: Bone Meal with Limestone added. In no case shall the diluent content exceed that of the fertilizer material. (Official 2001)
4. Phosphate (P_2O_5) and Potash (K_2O) - As the terms phosphate (P_2O_5) and potash (K_2O) are used universally in guaranteeing and in reporting the analysis of fertilizers it is recommended that the same terms also be used in reporting and discussing the results of analyses of related materials. (Official 1993)
5. Net Weights - The weights appearing on packages of fertilizers, agricultural lime, and liming materials shall always mean net weights. (Official 1953)
6. Mixtures of Ammonium Nitrate and Limestone or Dolomite - These shall not be designated as "ammonium calcium nitrate", "calcium ammonium nitrate" or similar names which imply the presence of either calcium nitrate or ammonium carbonate in such mixture. (Official 1953)
7. Activity of Water Insoluble Nitrogen in Mixed Fertilizers - The neutral and alkaline permanganate methods (AOAC International Methods No. 920.06 and 920.07, 15th Ed., respectively) distinguish between the better and the poorer sources of water insoluble nitrogen, and do not show the percentage availability of the materials. The available nitrogen of any product can be measured only after carefully conducted vegetation experiments.
 - (a) The methods shall be used on mixed fertilizers containing water insoluble nitrogen amounting to three-tenths (0.3%) of one percent or more of the weight of the material. If a total nitrogen exceeds the minimum guarantee and is accompanied by a low activity of the insoluble nitrogen, the over-run shall be taken into consideration in determining the classification of the Water Insoluble Nitrogen.
 - (b) The water insoluble nitrogen in mixed fertilizers showing an activity below fifty percent (50%) by the alkaline method and also below eighty percent (80%) by the neutral method shall be classed as inferior. This necessitates the use of both methods, also the provision as to over-run in (a), before classifying as inferior. (Official 1966)
8. Fused and Noncrystalline Phosphate Products - These shall be marketed with an adequate statement concerning size of particles, in terms of percentages of the total product which pass through U.S. Standard Sieves of stated sizes. (Official 1958)
9. Specialty Fertilizer Labels - Any product coming under the fertilizer law shall not carry labels to emphasize that dilutions will make _____ gallons of fertilizer. Specific claims, such as "contents of this package will make _____ gallons of fertilizer" should be prohibited. The labels shall not carry any extravagant and misleading advertising and claims. (Official 1958)
10. Amount of Chlorine Permissible in Fertilizers in Which the Potash is Claimed to be Present in Form Other than Chloride - The chlorine in mixed fertilizers in which the potash is claimed in form

other than chloride shall not exceed one-half of one percent (0.5%) more than five percent (5%) of the potash content found. (Calculate as follows: 0.05 times the percentage of potash found plus 0.5). (Official 1976)

11. Labels for Liming Materials Mixtures - Artificial mixtures of two or more liming materials or of gypsum and liming materials shall include on the label a list of the ingredients used. (Official 1958)
12. Sieve Numbers - Sieve numbers designate sieve openings conforming to the United States Standard Sieve Series according to ASTM Specifications E-11-01 and ISO 565. (Official 1989)
13. Reporting Analyses - Reporting the analyses of official samples is an integral part of fertilizer control, and their usefulness to manufacturers and guarantors is largely dependent upon the time lapse between sample collection and reporting. Every effort should be expended toward reporting analyses within a reasonable period of time after sample collection. (Official 1976)
14. Fertilizer Legislation - The Uniform Bill and Regulations are the result of considerable study and deliberation. Control officials and industry should keep each other advised of pending legislation and provide the necessary information to promote uniformity. (Official 1976)
15. Sampling - The proper collection of a sample is the foundation of a sound and equitable fertilizer program. AOAC International has adopted official sampling procedures and apparatus, thus these should be used by all states. (Official 1976)
16. Guarantees for Fertilizer Materials - Fertilizer materials containing only one plant food and recognized by their chemical names are required to list only a guarantee for the plant food contained therein. For example, the only guarantee required for ammonium nitrate would be "Total Nitrogen (N)....33.5%". (Official 1976)
17. Coated Slow Release or Occluded Slow Release Nutrients - When nutrients in a fertilizer are coated, or occluded to obtain slow release properties, then the guarantees for those components may be shown as footnotes rather than as a component following each nutrient. For example,

(a) A fertilizer with one coated material:

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 ₂ O ₅)	15%
Soluble Potash (K ₂ O)	20%
Sulfur (S)	14%
-----	---

* _____ % Slowly available 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 ₂ O ₅)	15%
Soluble Potash (K ₂ O)	20%
Sulfur (S)	14%
-----	---
* ____ % Slowly Available Nitrogen From _____	

- (c) A fertilizer with two (2) or more nutrients from coated materials:

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 ₂ O ₅)*	15%
Soluble Potash (K ₂ O)*	20%
Sulfur (S)	14%
-----	---

(Official 1993)

*The nitrogen, phosphate and potash materials in this product have been coated to provide 9.0% coated slow release nitrogen (N), 13% coated slow release available phosphate (P₂O₅), and 18% coated slow release Soluble Potash (K₂O). (Official 1994)

18. Sampling of On-Farm Bulk Storage - No sample obtained from on-farm bulk storage owned and/or controlled by the farmer-consumer shall be designated as "official" unless (1) the sample is taken in the presence of the farmer-consumer and the fertilizer registrant or their respective representatives; or (2) the sample is taken in the presence of the farmer-consumer or his representative, the fertilizer registrant having been informed and accepting responsibility for the quality of product sampled; or (3) the sample is taken in the presence of the farmer-consumer or his representative and he certifies by written affidavit that the product as sampled, and identified upon the delivery statement, has not been altered or mixed with any other. (Official 1982)
19. Mixed Fertilizer - A deficiency in an official sample of mixed fertilizer resulting from non-uniformity is not distinguishable from a deficiency due to actual plant nutrient shortage and is properly subject to official action. (Official 1984)
20. Brand - The brand of a fertilizer shall be used by the registrant/licensee in the labeling and by the control official in his reports and publications. No numeral(s) that are misleading or confusing shall be used in the brand of a fertilizer. (Official 1987)
21. Slowly Available Water Soluble Nitrogen - When a fertilizer material or fertilizer mixture contains recognized and determinable forms of water soluble nitrogen with slowly available properties, then the guarantees for those components, if claimed, should be shown as footnotes rather than as a component in the nitrogen breakdown. For example:

SLOW FERTILIZER 20-0-0

GUARANTEED ANALYSIS

Total Nitrogen (N).....20%
8% Urea Nitrogen
2% Other water soluble Nitrogen
2.9% Slowly Available Water Soluble Nitrogen*
7.1% Water Insoluble Nitrogen

*Slowly Available Nitrogen from _____.

OR

SLOW FERTILIZER 20-0-0

GUARANTEED ANALYSIS

Total Nitrogen (N).....20%
8% Urea Nitrogen
4.9% Other Water Soluble Nitrogen*
7.1% Water Insoluble Nitrogen

* ____% Slowly Available Nitrogen from _____.

Note: When other recognized forms of water soluble nitrogens are listed in the N breakdown, then the term "other" must precede the "water soluble nitrogen*" footnoted breakdown. (Official 1987) The word "organic" may be used in the nitrogen breakdown where appropriate. (Official 1992)

22. Animal Manures - If ingredients are added to animal manure the ingredients shall be specified on the principal label of the container. If the added ingredient exceeds the amount of manure, it shall be the first ingredient listed on the principal label and the words, "manure", "cow manure", "sheep manure", etc., shall be in type smaller than that used for such added ingredient. When the packaging of a product features the picture of a designated animal, manure of that species of animal shall comprise more than 50% of the material in the container. (Official 1991)
23. Fertilizer Materials - Fertilizer materials not defined by AAPFCO can be used as fertilizer materials provided the registrant furnishes an acceptable definition, AOAC International or other appropriate method of analysis, and agronomic data when deemed necessary. (Official 1991)
24. Plant or Animal By-Products - Plant or animal by-products that meet the requirements of current group definitions (e.g. N-19. Process Tankage) may be listed by name on the label provided the registrant furnishes an acceptable definition, AOAC International or other appropriate method of analysis, and agronomic data when deemed necessary. (Official 1991)

25. Metals in Fertilizers Federal, state and industry sponsored risk-based assessments¹ have been completed and the results demonstrate that metals in fertilizer generally do not pose harm to human health or the environment. Except as otherwise provided below, as a guide² for implementation of Section 13(a) of the Uniform State Fertilizer Bill, fertilizers that contain guaranteed amounts of phosphates and/or micronutrients are adulterated when they contain metals in amounts greater than the levels of metals established by the following table:

Metals	ppm per 1% P ₂ O ₅	ppm per 1% Micronutrients ³
1. Arsenic	13	112
2. Cadmium	10	83
3. Cobalt	136	2,228 ⁴
4. Lead	61	463
5. Mercury	1	6
6. Molybdenum	42	300 ⁴
7. Nickel	250	1,900 ⁴
8. Selenium	26	180
9. Zinc	420	2,900 ⁴

To use the Table chose one of the following three situations.

1. Fertilizers with a phosphate guarantee; but, no micronutrient guarantee:

Multiply the percent guaranteed P₂O₅ in the product by the values in the table to obtain the maximum allowable concentration of each metal. The minimum value for P₂O₅ utilized as a multiplier shall be 6.0.

2. Fertilizers with one or more micronutrient guarantees; but, no phosphate guarantee:

Multiply the sum of the guaranteed percentages of all micronutrients (as defined by AAPFCO's Official Fertilizer Term, T-9) in the product by the value in the appropriate column in the Table to obtain the maximum allowable concentration (ppm) of each metal. The minimum value for micronutrients utilized as a multiplier shall be 1.

3. Fertilizers with both a phosphate and a micronutrient guarantee:

- Multiply the guaranteed percent P₂O₅ by the value in the appropriate column. The minimum value for P₂O₅ utilized as a multiplier shall be 6.0. Then,
- Multiply the sum of the guaranteed percentages of the micronutrients by the value in the appropriate column. The minimum value for micronutrients utilized as a multiplier shall be 1. Then,
- Utilize the higher of the two resulting values as the maximum allowable concentration (ppm) of each metal.

Biosolids and all Compost Products

Biosolids, and all compost products⁵, shall be adulterated when they exceed the levels of metals permitted by the United States Environmental Protection Agency Code of Federal Regulations, 40 CFR Part 503. Dried biosolids and manure, as well as manipulated manure products either separately or in combination, shall also be deemed adulterated when they exceed the levels of metal permitted by the United States Environmental Protection Agency Code of Federal Regulations, [40 CFR Part 503](#).

Hazardous waste derived fertilizers (as defined by EPA) shall be adulterated when they exceed the levels of metals permitted by the United States Environmental Protection Agency Code of Federal Regulations, [40 CFR Parts 261, 266 and 268](#).

Footnotes:

¹ Woltering, Daniel M. 2004. Health Risk Assessment for Metals in Inorganic Fertilizers: Development and Use in Risk Management. In Environmental Impact of Fertilizer on Soil and Water. Hall, William L. Jr. and Wayne P. Robarge, Editors. American Chemical Society Symposium Series No. 872. p124-147.

² These guidelines are not intended to be used to evaluate horticultural growing media claiming nutrients but may be applied to the sources of the nutrients added to the growing media.

³ Micronutrients (also called minor elements) are essential for both plant growth and development and are added to certain fertilizers to improve crop production and/or quality. These micronutrients are defined by AAPFCO's Official Fertilizer Term, T-9.

⁴ Only applies when not guaranteed.

⁵ Includes all compost products separately or in combination with biosolids, manure or manipulated manure, even those registered as fertilizers (making nutrient claims).(Official 2003)

26. Product Labels that Meet Metal Guidelines – Products that meet the guidelines for metals may include the following statement on the label:

“When applied as directed, this product meets the guidelines for metals adopted by the Association of American Plant Food Control Officials.” (Official 1999)

27. Uniform Internet Site Statements - Recommended uniform Internet site statements for states requiring disclosure of metals information may include:

“Information regarding the contents and levels of metals in this product is available on the Internet at: <http://www.aapfco.org/metals>”

or

“Information regarding the contents and levels of metals in this product is available on the Internet at: <http://www.regulatory-info-xx.com>”.

Each registrant shall substitute a unique alphanumeric identifier for “xx”.

This statement may be used only if the licensee establishes and maintains the Internet site; there is a clearly visible, direct hyperlink to a government website; and, the Internet site contains no advertising or company-specific information. (Official 2003)

28. Labeling of Organic Input Products. Products intended for use as organic inputs may make statements on the products label that affirm that the product is in accord with the National Organics Program (NOP) (e.g. “suitable for organic farming”, “acceptable for use in organic production”, “meets National Organic Program requirements for organic production”), and may use the logos issued by recognized agencies such as OMRI (Organic Materials Review Institute), certifying agencies, state programs, or other recognized organic input listing services. Such statements are exempt from requirements pertaining to organic labeling under the fertilizer law. (Official 2008)

29. Organic fertilizers whose label or labeling includes statements regarding the presence of organic matter and claims consistent with established agronomic benefits that organic matter imparts on soils need not be dual-registered as a soil amendment provided that the product is registered as a fertilizer. (Official 2012)

30. Enhanced Efficiency Fertilizers - [N, P, K, Secondary & Micronutrient]

These fertilizers can achieve improved efficiency of nutrient use and minimize the potential of nutrient losses to the environment. They achieve this through mechanisms that slow the release of plant available nutrients into the soil (or growth media), or extend the time that available nutrients remain in the soil (or growth media). Additionally, future technologies may accomplish these same results by altering nutrient delivery or chemistry by other means to be determined and approved by AAPFCO.

Only nutrient forms that have approved EEF properties can use the EEF term on labeling. In order to use EEF on the label, an approved mechanism for attaining the enhancement must be stated in the AAPFCO term or product definition.

EEF – To make an ‘Enhanced Efficiency Fertilizer’ claim for a fertilizer, manufacturers must:

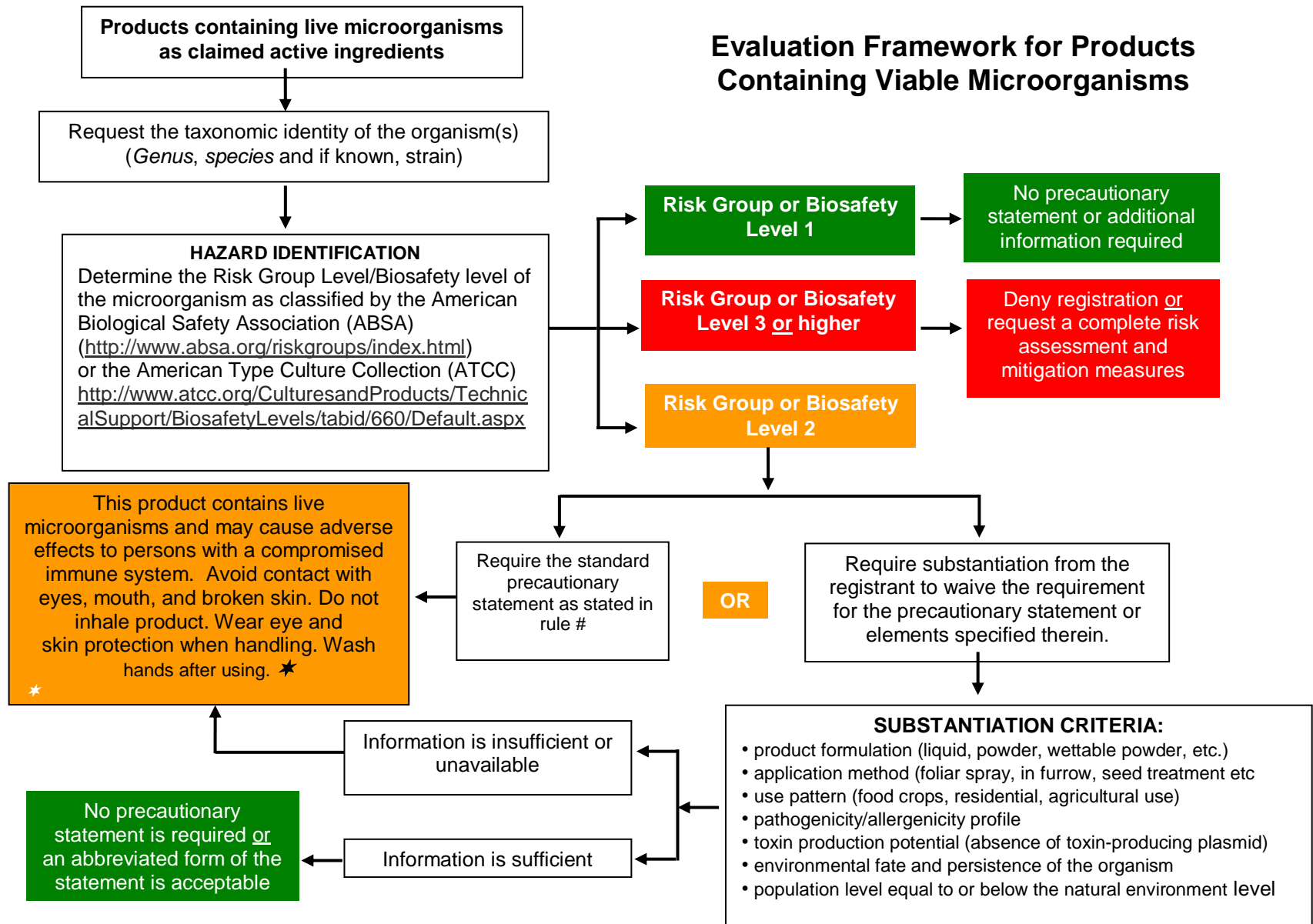
- Reference an ingredient with an approved EEF mechanism or property as denoted by an ‘€’ in the official terms and definitions section of the most current AAPFCO Official Publication.
- State the quantity of the approved EEF component on the label. AAPFCO definition names with the symbol ‘#’ identify a product permitted to claim EEF properties. (Official 2014)

SUIP 31. Precautionary statement evaluation for fertilizers and soil amendments containing beneficial bacteria that are also known to be human pathogens (Official 2014)

Registrants of products that contain live microorganism(s) as active ingredients shall provide proof of the taxonomic identity of the organism(s) to the genus and species level and provide strain when known. Microorganisms that are listed as Risk Group Level 2 by the American Biological Safety Association (ABSA) on at least 3 of 9 reporting agencies or Biosafety Level 2 as defined by the American Type Culture Collection (ATCC) shall include the following precautionary statement on the label UNLESS sufficient safety information is provided by the registrant to waive the requirement or elements specified therein:

“This product contains live microorganisms and may cause adverse effects to persons with a compromised immune system. Avoid contact with eyes, mouth, and broken skin. Do not inhale product. Wear eye and skin protection when handling. Wash hands after using.”

Consult the flowchart, *Evaluation Framework for Products Containing Viable Microorganisms*, for further information on the recommended evaluation process.



* The precautionary statement is not required to be used verbatim as long as the meaning and intent is reflected on the product

[SUIP 32. When appearing on a label, chlorine may be expressed as both chloride (Cl⁻) or chlorine (Cl₂). (Tentative 2015, SA)]

[SUIP 33. Globally Harmonized System Labeling: Products which must meet the Globally Harmonized System of Classification and Labeling of Chemicals (GHS) requirements in accordance with the Occupational Safety & Health Administration's (OSHA) Hazard Communication Standards, may include the information required by OSHA on the fertilizer label. Such statements and labeling are recognized as valid label text and will not be considered in violation of the State fertilizer laws. (Tentative 2015, SA)]