

OFFICE OF THE TEXAS STATE CHEMIST

Texas Feed and Fertilizer Control Service • Agricultural Analytical Service

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FERTILIZER INDUSTRY MEMORANDUM 5-11

FERTILIZER MIXTURES THAT CONTAIN NUTRIENT STABILIZER ADDITIVES

OBJECTIVE:

To define registration, labeling, and measurement requirements of nutrient stabilizer additives in accordance with the Texas Commercial Fertilizer Control Act §63.002 and the Texas Commercial Fertilizer Rules §65.17 and §65.27.

BACKGROUND:

The Texas Commercial Fertilizer Code §63.002 explains that unless otherwise stated in the Act, a substance is subject to the Law if it is a fertilizer material (§63.001(8)), a mixed fertilizer (§63.001(11)), a customer-formula fertilizer (§63.001(5)), or any other substance or material that is intended for use, or used, as a component of a mixture that is intended to promote plant growth. This provision allows the Texas Feed and Fertilizer Control Service to enforce requirements pertaining to the registration, labeling, and measurement of certain agricultural products incorporated in commercial fertilizer mixtures.

As per the Texas Commercial Fertilizer Rules §65.17(e)(3), the Service may request proof that any non-nutritional fertilizer components or additives guaranteed or claimed on the label provide: long-term safety to animals, plants, and the environment; and availability and efficacy. Texas Commercial Fertilizer Rules §65.27 requires that when additives are incorporated in a commercial fertilizer: the fertilizer mixture must be registered in accordance with §63.031 and guaranteed with respect to the kind and percentage of each additive (§63.051 & §63.053); the additive(s) must be determinable by an acceptable laboratory method; and the fertilizer mixture must be labeled to prominently display the purpose of the additive. In addition, it must be shown by scientific data that each additive is present in sufficient quantities to impart a distinctive characteristic to the product.

In response to the increased production and use of nutrient stabilizer additives with Enhanced Efficiency (Fertilizer) (EEF) properties, as defined by the American Association of Plant Food Control Officials (AAPFCO), the Service details the requirements below.

POLICY:

A. Registration of Fertilizer Mixtures that Contain Nutrient Stabilizer Additives

Fertilizer mixtures, except customer-formula fertilizer mixtures, that incorporate a nutrient stabilizer with EEF properties must be registered with the Service. The registration requirement applies to any fertilizer material, mixed fertilizer, or specialty fertilizer

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(§63.001(16) that contains a nutrient stabilizer additive(s).

B. Labeling Fertilizer Mixtures that Contain Nutrient Stabilizer Additives

Commercial fertilizer mixtures, including customer-formula fertilizer, that incorporate nutrient stabilizer additives must state the following for each additive:

- i. Kind of Additive;
- ii. Purpose of the Combined Fertilizer and Nutrient Stabilizer Additive; and
- iii. Quantity of Additive (% by weight).

C. Measurement of Nutrient Stabilizer Additives

Each nutrient stabilizer additive in a fertilizer mixture must have a currently accepted laboratory method of analysis. Companies that wish to register fertilizer mixtures that contain nutrient stabilizer additives with the Service must:

- i. Incorporate products permitted by AAPFCO to claim EEF properties; or
- ii. Provide to the Service scientific data to show that each nutrient stabilizer additive is present in sufficient quantities to impart a distinctive characteristic to the product.



Dr. Timothy J. Herrman
State Chemist & Director
Office of the Texas State Chemist

**APPENDIX 1
EXAMPLE OF BAGGED PRODUCT
with Nitrogen Stabilizer**

Product Name	Green Grow
Grade Statement	21-7-14
Guaranteed Analysis	GUARANTEED ANALYSIS Total Nitrogen (N).....21% 17.25% Urea Nitrogen 3.75% Ammoniacal Nitrogen Available Phosphate (P2O5) 7% Soluble Potash (K2O) 14% Magnesium (Mg)..... 1.75% Sulfur (S)..... 6% Boron (B)..... 0.08%
Derived From Statement	Derived from: Potassium Magnesium Sulfate, Ammonium Sulfate, Mono Ammonium Phosphate, Urea, Potash, Boric Acid
Nitrogen Stabilizer Additive Guarantee	NFIXX (Nitrogen Stabilizer)..... 0.2%
Directions for Use	<i>Information concerning the application rate per acre can be obtained by writing to the guarantor identified on this label and referring to the invoice number shown on the invoice.</i>
Name and Mailing Address of Guarantor	Farm Co-op Hwy 1, Box 7 Centerville, Any State Zip Code
Net Weight or Volume	Net Weight – 25 lb (11.33 kg)

**APPENDIX 2
EXAMPLE OF BAGGED PRODUCT
with Nitrogen Stabilizer**

Product Name	Green Grow
Grade Statement	28-3-10
Guaranteed Analysis	GUARANTEED ANALYSIS Total Nitrogen (N).....28% 17.25% Urea Nitrogen 3.75% Ammoniacal Nitrogen Available Phosphate (P2O5) 3% Soluble Potash (K2O) 10% Iron (Fe)..... 4.50%
Derived From Statement	Derived from: Urea, Diammonium Phosphate, Muriate of Potash, Iron Sulfate
Nitrogen Stabilizer Additive Guarantee	Dicyandiamide (Nitrogen Stabilizer)..... 1.05%
Directions for Use	<i>Information concerning the application rate per acre can be obtained by writing to the guarantor identified on this label and referring to the invoice number shown on the invoice.</i>
Name and Mailing Address of Guarantor	Farm Co-op Hwy 1, Box 7 Centerville, Any State Zip Code
Net Weight or Volume	Net Weight – 25 lb (11.33 kg)

**APPENDIX 3
EXAMPLE OF CUSTOMER FORMULA
with Nitrogen Stabilizer**

	Farm Co-Op
Customer's Name and Address	Customer: _____
Date of Sale	Address: _____
Grade Statement	Date: _____
Guaranteed Analysis	GRADE <u>46-0-0</u>
	GUARANTEED ANALYSIS
	Total Nitrogen (N)..... <u>46 %</u> Gross _____
	Available Phosphate (P2O5).... <u>0 %</u> Tare _____
	Soluble Potash (K2O) <u>0 %</u> Net _____
Derived From Statement	Derived from: Urea
Nitrogen Stabilizer Additive Guarantee	NBPT (Nitrogen Stabilizer)..... 0.2%
Directions for Use	<i>Information concerning the application rate per acre can be obtained by writing to the guarantor identified on this label and referring to the invoice number shown on the invoice.</i>
Guarantor's Name and Address	Farm Co-Op Hwy 1, Box 7 Centerville, Any State Zip Code Phone Number
Net Weight or Volume	Net Weight – 5500 lbs.

**APPENDIX 4
EXAMPLE OF CUSTOMER FORMULA
with Nitrogen Stabilizer**

Date of Sale

**Customer's Name and
Address**

Net Weight or Volume

Grade Statement

Guaranteed Analysis

**Nitrogen Stabilizer Additive
Guarantee**

**Directions for Use and
Components**

**Name and Address of
Guarantor**

Farm Co-Op

Date: _____
Customer: _____
Address: _____

Net Weight (Bulk) _____

GRADE 46-0-0

GUARANTEED ANALYSIS

Total Nitrogen (N).....46%

NFIXX (Nitrogen Stabilizer)..... 0.2%

For maximum acceptable application rates and components of this fertilizer write to the guarantor and reference the invoice number.

Farm Co-op
Hwy 1, Box 7
Centerville, Any State Zip Code
Phone Number

**APPENDIX 5
EXAMPLE OF CUSTOMER FORMULA
with Nitrogen Stabilizer**

**Customer's
Name and Address**

Date of Sale

Grade Statement

Guaranteed Analysis

**Nitrogen Stabilizer
Additive Guarantee**

Directions for Use

**Guarantor's Name and
Address**

Net Weight or Volume

Farm Co-Op

Bill To: _____ **Ship to:** _____
Address: _____ **Address:** _____
Date: _____ **Date:** _____

GRADE 28-0-9

<u>Description</u>	<u>Quantity (lbs.)</u>
Urea.....	3500
Ammonium Sulfate.....	1000
Muriate of Potash.....	1000

GUARANTEED ANALYSIS

Total Nitrogen (N).....28%
Soluble Potash (K₂O)9%
Sulfur (S).....3%

NBPT (Nitrogen Stabilizer)..... 0.2%

Information concerning the application rate per acre can be obtained by writing to the guarantor identified on this label and referring to the invoice number shown on the invoice.

Farm Co-Op
Hwy 1, Box 7
Centerville, Any State Zip Code
Phone Number

Net Weight – 5500 lbs.