

Slow Release Nitrogen Label Exercises

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Labels are not always clear!

- Varying definitions
- Lots of information in one location
- Asterisks

GUARANTEED ANALYSIS

Total Nitrogen (N)	10%
5.2% Ammoniacal Nitrogen	
2.2% Water Insoluble Nitrogen*	
1.3% Urea Nitrogen	
1.3% Other Water Soluble Nitrogen*	
Available Phosphate (P₂O₅)	18%
Soluble Potash (K₂O)	18%
Magnesium (Mg).....	0.5%
0.5% Water Soluble Magnesium (Mg)	
Sulfur (S).....	7.0%
7.0% Combined Sulfur (S)	
Iron (Fe)	0.5%
0.5% Water Soluble Iron (Fe)	
Manganese (Mn)	0.25%
0.25% Water Soluble Manganese (Mn)	
Derived From: Ammonium Phosphate, Ammonium Sulfate, Methylene Ureas, Urea, Sulfate of Potash, Sulfate of Potash Magnesia, Ferrous Sulfate, Manganese Sulfate.	
Chlorine (Cl) not more than.....	2.0%
3.5% Slowly Available Nitrogen from Methylene Ureas.	

Determining % Slow Release

10% total N

3.5% SAN from methylene ureas

$$\frac{3.5\%}{10\%} = 0.35 \times 100 = 35\%$$

GUARANTEED ANALYSIS

Scotts® Turf Builder® Lawn Food

32-0-4

F 643

Total Nitrogen (N).....32%

4.9% ammoniacal nitrogen

15.1% urea nitrogen

11.0% other water soluble nitrogen*

1.0% water insoluble nitrogen*

Soluble Potash (K₂O)4%

Sulfur (S)7%

7.0% combined sulfur (S)

Iron (Fe)2%

0.02% water soluble Iron (Fe)

Derived from: methyleneureas, urea, potassium sulfate, ammonium sulfate, iron sucrate.

* Contains 9% slowly available nitrogen from methylenediurea, dimethylenetriurea and water insoluble nitrogen.

Determining % Slow Release

32% total N

9% SAN from methylene ureas

$$\frac{9\%}{32\%} = 0.281 \times 100 = 28\%$$

UFLEXX[™]
STABILIZED NITROGEN

46-00-00

GUARANTEED MINIMUM ANALYSIS

TOTAL NITROGEN (N): 47.00%
46% from stabilized nitrogen

GENERAL INFORMATION

UFLEXX contains the urease inhibitor N-(n-butyl) thiophosphoric triamide (NBPT). NBPT is used with urea or urea based fertilizer formulations to retard the hydrolysis of urea which is catalyzed by the urease enzyme. The net beneficial effect of this application is to reduce the loss of ammonia by volatilization for up to fourteen (14) days when used in surface applications.

Determining % Slow Release

47% total N

46% Stabilized N

$$\frac{46\%}{47\%} = 0.978 \times 100 = 98\%$$

Guaranteed Analysis

Total Nitrogen (N)	32.00%
32.00% Urea Nitrogen*	
Soluble Potash (K₂O)	10.00%
Sulfur (S)	3.60%
Iron (Fe)	2.00%

Derived From: Polymer Coated Urea, Urea, Sulfate of Potash, and Iron Oxysulfate.

*29.00% Slowly Available Urea Nitrogen from Polymer Coated Urea

Determining % Slow Release

32% total N

29% Stabilized N

$$\frac{29\%}{32\%} = 0.906 \times 100 = 91\%$$

GUARANTEED ANALYSIS

Total Nitrogen (N)*	14.00%
8.50% Ammoniacal Nitrogen	
5.50% Nitrate Nitrogen	
Available Phosphate (P ₂ O ₅)*	14.00%
Soluble Potash (K ₂ O)*	14.00%
Sulfur (S)*	4.00%
4.00% Combined Sulfur (S)	

DERIVED FROM: Polymer coated homogeneous ammonium nitrate, ammonium phosphate, potassium sulfate

* The Nitrogen, phosphate and potash materials in this product have been coated to provide 14% coated slow release Nitrogen (N), 14% coated slow release available phosphate (P₂O₅), 14% coated slow release soluble potash (K₂O) and 4% coated slow release sulfur (S).

Determining % Slow Release

14% total N

14% Stabilized N

$$\frac{14\%}{14\%} = 1.0 \times 100 = 100\%$$

Questions?