



Title POLYON PCU, Nursery Grades,
Regular Size

No. PD-4f

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Product Names: POLYON[®] Coated Urea; Polymer Coated Urea (PCU)

Note: PCU is Association of American Plant Food Control Officials (AAPFCO) Definition (N-32), Official Pub. No. 53, 2000

Label Guaranteed Analysis: 41-0-0, 40-0-0, 38.5-0-0, 37-0-0

Total Nitrogen (N)41, 40, 38.5, 37%
41, 40, 38.5, 37% Urea (N)*

Source of Nutrient: urea

*This product has been coated to provide 41, 40, 38.5, 37% slowly available urea nitrogen from resin coated urea as manufactured, per AOAC 970.04 (Katz) method.

Physical Characteristics:

Size, U.S. Std. Sieve- -6+12

SGN range- 240-270

Uniformity Index- 55-65

Bulk Density- lbs/cu ft 46-49

Angle of Repose- 30-34

Particle Hardness- 5-7 lbs to crush per TFI Method IV

Product Longevity: These products are designed to last 4, 5, 6, 7 months, respectively, at 80°F.

Abrasion/Impact Resistance: The POLYON polymer coating is tough and durable; and, therefore, its release control quality remains unaltered even after being subjected to most conveying, blending, and application operations. This means label guarantees for controlled release nitrogen can be met consistently when tested by the state fertilizer control chemists.

Official Test for Coated Slow Release Label Guarantee: The label guarantee for coated slow release nitrogen, CSRN, is as manufactured and shipped, tested per the Association of Official Analytical Chemists, AOAC 970.04 method, commonly referred to as the Katz test, the method approved by the Association of American Plant Food Control Officials, AAPFCO. The percentage of unreleased nitrogen is determined after a 2-hour water leaching (dynamic flow) test conducted at 70°F. This official test method for the label guarantee does not determine the actual release, e.g. the CRP, of the nitrogen, which remains unreleased after the 2-hour test period.

Moisture Resistance: During storage POLYON coated urea remains dry and free flowing even in hot, humid conditions. The critical relative humidity (CRH) at 86°F is above 90%. Uncoated urea, by comparison has a CRH from 70% to 75%; however, a blend containing both uncoated urea and POLYON coated urea assumes the CRH of the urea.