



DE-THATCHER

15-0-0 RICH ORGANIC SOLUTION

With 15% SLOW RELEASE NITROGEN

- **NATURALLY OCCURRING BACILLUS STRAINS**
- **CONTAINS ENZYME-PRODUCING MICROBES**

GUARANTEED ANALYSIS

Total Nitrogen (N)15%
15% Slowly Available Water Soluble Nitrogen*

Derived From: Methylene Urea

15% slowly available nitrogen from Methylene urea

STATEMENT OF COMPOSITION

Total Bacillus Bacterianot less than..... 9.7×10^6 / gal.
Protease.....not less than.....0.01 CSU / gal.
Cellulase.....not less than.....0.01 FPU / gal.
Amylase.....not less than.....0.01 SLU / gal.

"Also Contains Non Plant Food Ingredients"

Dried Bacillus Megaterium Fermentation Product, Dried Bacillus Licheniformis Fermentation Product, Dried Bacillus subtilis Fermentation Product, Dried Aspergillus Oryzae Fermentation Extract, Calcium Carbonate, natural wetting agent, plant extracts, simple and complex sugars

Weight per gallon10.4 lbs.

Weight per litre 1.24 kg

PURPOSE

Control De-Thatcher is a unique blend of carbon based raw materials, slow release nitrogen from a carbon / nitrogen source and a concentrated source of naturally occurring soil microorganisms. This organic inoculant was developed to assist in the breakdown of thatch and other composting media.

The breakdown of complex organic materials like thatch is often very difficult because of the high ratio of lignin and cellulose fibers. It requires a balance of naturally occurring soil microbes, select enzymes and an adjustment in the ratio of carbon to nitrogen for this breakdown to occur. Thatch is a complex organic molecule containing lignin and cellulose tough fibers that require microbial activity to break down and become a food source for plant materials. If any one of these elements is missing, thatch formation will increase, severely interfering with the turf's ability to absorb nutrients and water.

The specific microbes contained in Control De-Thatcher when applied to the soil produce significant quantities of protease and cellulase that will digest protein contained in thatch and other organic compounds in the soil. Bacillus also produces cellulase, amylases, lipases, xylanases, and pectinases, which breach down organic matter into valuable nutrients.

THE C/N RATIO

The unique nitrogen source contained in Control De-Thatcher is

CAUTION: Keep out of reach of children. In case of contact with eyes, flush immediately with copious amounts of water. Contact a physician. Do not take internally.

- **SLOW RELEASE NITROGEN**
- **PROTEASE, CELLULASE AND ENZYMES**

a synthetic organic compound (carbon / nitrogen molecule). This slowly available nitrogen provides both carbon and nitrogen for soil microorganisms. With the addition of Control De-Thatcher, the C/N ratio -- as it narrows -- further encourages decomposition of organic residues. The slow release nitrogen source further discourages the formation of additional thatch that is produced as a result of fast release nitrogen sources.

APPLICATION RECOMMENDATIONS

Turf Applications: Control De-Thatcher can be applied at a spray rate of 1 to 3 gallons of tank mix per 1,000 sq. ft. throughout the growing season on cool, warm, and transitional grasses where thatch control is needed. In cases where thatch has accumulated, apply early in the spring once soil temperatures have reached 45 deg. F. Apply at a rate of 10-12 fl. oz. per 1,000 sq. ft. as a corrective application for a period of 3 - 4 months.

For general maintenance and control of thatch, apply at a rate of 5 to 6 fl. oz. per 1,000 sq. ft. per month during the entire growing season. Since, Control De-Thatcher contains 15% SRN, reduce the total rates of nitrogen in your fertility program to avoid excessive top growth.

COMPOSTING

Control De-Thatcher will accelerate the decomposition of composting materials through its microbial and enzyme activity. Mix 1 gal. of Control De-Thatcher in 100 gal. of water (4 liters in 400 liters) Apply as compost is turned, three times per year.

MIXING

Control De-Thatcher can be tank mixed with other technical materials. Use all of tank mix solution within 6 hours.

SHAKE WELL BEFORE USING

Manufactured By:

