

DeThatch-9®

SPECIMEN LABEL

- Reduces or eliminates unhealthy thatch
- Enhances composts and compost teas
- Breaks down cellulose and lignin
- Converts thatch to nutrients useable plants
- 100% Soluble - Will not clog machinery

ACTIVE INGREDIENTS:

Streptomyces violaceusniger YCED-9*..00.01%

OTHER INGREDIENTS:99.00%

*Contains a minimum of 1 X 10⁸ colony forming units per milliliter

Manufactured by:

Natural Industries, Inc.

6223 Theall Road

Houston, Texas 77066

Questions? (888) 261-4731

General Information:

DeThatch-9® is an all-natural, biological inoculant. The active ingredient in DeThatch-9® breaks down dead plant tissue and frees up soil from harmful thatch accumulation. This powerful microbe actually uses thatch (cellulose and lignin) as a food source and converts it to by-products that are beneficial and useable to plants and turf. Turf treated with DeThatch-9® will also become hardier and more robust with a protected root system.

DeThatch-9® is also an excellent compost accelerator and is perfect for adding to compost piles or to be used in conjunction with compost teas.

Compatibility

DeThatch-9® can be tank mixed with fertilizers, chemical fungicides, insecticides, and herbicides as well as and other biologicals. Avoid using in conjunction with bactericides and soil fumigants.

APPLICATION DIRECTIONS:

Turf Grass

Mix DeThatch-9®, with appropriate amount of water (100-125 gallons or more per acre). Apply at a rate of 18-oz of DeThatch-9®, per acre (36 grams per 1,000 sq. ft.) for initial application or problem areas. Maintenance applications of 6-oz per acre (12-gr/1,000 sq. ft.) every 4 to 6 weeks is recommended.

If applying as a spray, water in immediately for 2-3 minutes with sprinklers in order to move the active ingredient into the thatch.

Composting

Dissolve 2-oz of DeThatch-9® into 50 gallons of water to create solution. Apply solution to compost at a rate of 50 gallons per 6 cubic yards of soil.

Compost Teas

Add 1/4 tsp of DeThatch-9® per gallon of compost tea. Do this during tea application or just prior to tea application.

Limited Warranty / Disclaimer: Manufacturer warrants that this product is suited for the labeled use when applied according to label directions. Manufacturer makes no warranty of merchantability. There are no warranties that extend beyond the description on this label and in no event shall manufacturer be liable for any consequential damages.

MATERIAL SAFETY DATA SHEET

DeThatch-9®

I. PRODUCT INFORMATION

General Use: Thatch Inoculant

Chemical Formulation: N/A.

Common Name: DeThatch-9®

Molecular Weight: N/A

II. PHYSICAL PROPERTIES

Bulk Density: 5.5

Solubility in H₂O: 100% soluble

pH (apparent): 8.3

Appearance: pale white

Odor: slight odor of rich soil

Boiling Point (degC): N/A

Melting Point (degC): N/A

Evaporation Rate: N/A

Vapor Pressure: N/A

III. INGREDIENTS

Components	% Range
Streptomyces sp.	00.0371
Inert Ingredients (confidential)	99.9629

IV. HEALTH AND HAZARD INFORMATION

A. Toxicity: none

B. Carcinogenicity: N/A not listed by NTP, LARC,

OSHA, ACGIH, ORHIOSH

C. Primary Route(s) of Exposure: Skin Contact, Ingestion

D. Health Effects of Over Exposure:

1. Inhalation: Nasal Irritation
2. Ingestion: Irritation of mucous membranes.
3. Skin: No negative side effects. Wash with soap and water.
4. Eyes: Slight irritation may occur. Flush with water.

E. Emergency and First Aid Measures:

1. Inhalation: Flush nose with water
2. Ingestion: Ingestion has shown no mammalian toxicity
3. Skin: Wash with soap and water.
4. Eyes: Flush with water for five minutes

V. FIRE AND EXPLOSION DATA

A. Fire: Not considered a fire hazard.

B. Explosion: Not considered an explosion hazard.

C. Fire Extinguishing Media: Water, CO₂, or dry chemicals may be used.

D. Precautions: No precautions are necessary under normal conditions of use. As with any dust avoid high concentrations

VI. PERSONAL PROTECTIVE GEAR

A. Eyes and Face: Though not necessary, safety glasses may be worn.

B. Respiratory: No respirator is required under normal conditions of use.

C. Skin: Though not necessary, gloves may be worn.

D. Shoes: Safety shoes are not necessary.

VII. STORAGE AND HANDLING

Actinovate® SP may be stored in all types of containers made of various materials of construction. Avoid contact with strong oxidizing agents.

VIII. SHIPPING INFORMATION

A. DOT Shipping Name: None

B. DOT Hazard Class: None

C. DOT Category: None

E. Reportable Qualities (RQ): None

F. HMIS: Personal Protective Code - A (Safety Glasses)

G. NFPA Rating: 0 (Health) - 0 (Flammability) - 0 (Reactivity)

IX. ENVIRONMENTAL PROTECTION PROCEDURES

A. Spill Response: No negative environmental impact.

No special cleanup requirements

B. Waste Disposal: No negative environmental impact. No special preparation required for disposal.

This information presented in this Materials Safety Data Sheet (MSDS) is subject to revisions and is not all inclusive, but represented as the best information available to date. This information was drawn from recognized sources, believed to be reliable. However, Natural Industries, Inc. will not be responsible for damages of any kind resulting from the use or reliance upon such information. The product discussed is sold without warranty, expressed or implied, and upon conditions that purchasers shall perform their own verification and testing to determine its suitability for a particular purpose.

Prepared by: Fred Sims Effective Date: February 16, 1998

Revisions: Matthew Kowalski - Natural Industries Inc. (281) 580-1643