Photo: © Stefan Von Stengel - Budersand

TourTurf® Thatch-Less® ETD

Enzyme Thatch Degrader

Thatch-Less® - Organic Matter Control

Enzymes reduce thatch, break down lignin and cellulose for healthy, firm playing surfaces.

TourTurf® Thatch-Less® ETD Enzyme Thatch Degrader is a biological activator for rapid thatch degradation and contains a broad spectrum of effectively working laccase-(>10,000 AU/L*), and cellulase enzymes (>250,000 AU/L*), plant sugars, wetting agent, seaweed and 4 different cellulase producing microorganisms ($5x10^9$ CFU/ml). Thatch control is the key to healthy turf, uninterrupted infiltration of nutrients and water into the rootzone and firm, true, playable surfaces.

This combination gives up to 25% documented reduction of residual organic matter (thatch) in sports turf, which typically consists of 25% lignin and 75% cellulose or hemicellulose. Because of performance pressures on sports turf, it is difficult to get the organic matter components of the thatch layer to decompose easily without the valuable enzyme and microbial input from TourTurf® Thatch-Less® ETD.

The combination of readily active enzymes and steadily performing microorganisms in this bioproduct makes it possible to degrade and convert the hard to breakdown thatch into plant nutrients, sugars and soil humus more effectively. The 4 beneficial Bacillus strains that make up the 'core consortia' of microorganisms in the product are B. subtilis, B. licheniformis, B. amyloliquefaciens and B. pumilus.

This unique and highly effective biological solution is developed for thatch- and organic matter control in sports turf by Danish and British scientists. Our microorganisms strains are fully traceable via genomic analysis (DNA fingerprint).

Guaranteed content

Thatch degrading Enzymes:
- Cellulase enzymes ..... (>250.000 AU/L*)
- Laccase enzymes ..... (>10.000 AU/L*)

Carbohydrates 2.0%
Wetting Agent 2.0%
Seaweed extract 5.0%

Thatch degrading microorganisms:
This product contains 4 different cellulase producing microorganisms.

Bacillus licheniformis ..... $1.25x10^9$ cfu/ml
Bacillus amyloliquefaciens $1.25x10^9$ cfu/ml
Bacillus subtilis ..... $1.25x10^9$ cfu/ml
Bacillus pumilus ..... $1.25x10^9$ cfu/ml
Total ..... $5.0x10^9$ cfu/ml

The enzymes used are derived from naturally occurring fungi and they degrade all forms of cellulose, hemicellulose and lignin.

pH: 7
Density: 1.03
Nozzles: Spray nozzles for larger droplets.
Optimum product performance between 15 and 30 °C.
The prefiltered product easily passes through a 100-mesh (150-micron) spray filter—the smallest typically used on sprayers.

Thatch-Less® Organic Matter Control

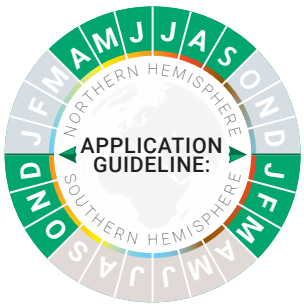
OF&G ORGANIC — PRODUCT APPROVED FOR RESTRICTED USE

Application

4 times - at 10 day intervals above 15°C.

Thatch Reduction: 10L/ha mixed in 700 L of water.
Dry Patch Reduction: 20L/ha mixed in 700 L of water.
Fairy Ring Reduction: 20L/ha mixed in 700 L of water.
Oil Spill Reduction: 20L/ha mixed in 700 L of water.

Synergy with FTD, OXT, MCB, EXC & EPT



Order number

8592
2 x 10 litres per carton

**AU/L = Activity Units. cfu = Colony-forming units. The product has GRAS status and is manufactured according to the recommendations given by FCC/JECFA/WHO/FAO for enzymes used in food production. The bacteria have QPS status according to EFSA. The product does not contain genetically modified organisms (Non-GMO).*
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