



Rethink Tomorrow

3935 Thatcher Avenue, Saskatoon, SK. S7R 1A3 Canada

# Material Safety Data Sheet

## 1. Product identification

Product use: *Penicillium* & *Mesorhizobium* inoculant

MSDS number: NZBC-311

Effective date: August 1, 2011

## TagTeam<sup>®</sup> peat chickpea

## 2. Composition:

### Component

Pure cultures of *Penicillium bilaii* fungus and *Mesorhizobium ciceri* bacterium

### CAS number

Not available

### % (w/w)

Not available

### Other ingredients:

Peat powder

Not available

Not available

Natural graphite

007782-42-5

Not available

Calcium carbonate

471-34-1

Not available

**Note:** This product contains beneficial microorganisms. Novozymes exclusively uses non-pathogenic beneficial microorganisms that are considered to be non-allergenic, non-irritating and non-sensitizing when used as directed. Exposure to very high levels of airborne microbial spores may result in very rare respiratory impairments or cause an allergic reaction in sensitized individuals. A Material Safety Data Sheet is supplied with all products.

### Emergency overview:

Individuals allergic to molds and/or fungi should avoid using this product. If use by allergic individuals is unavoidable, absorption by eye or skin contact, inhalation or ingestion must be prevented to minimize the chance of allergic reaction.

Do not vacuum up spills, since dust generated by this product may create an electrically conductive (explosive) medium when mixed with air.

## 3. Hazard identification:

**NFPA:** 1-Health, 1-Flammability, 1-Reactivity

### Potential health effects:

**Eyes:** Dust particles may cause eye irritation.

**Skin contact:** Peat and graphite dust may cause skin irritation

**Skin absorption:** A single prolonged exposure is not likely to result in this material being absorbed in harmful amounts. Do not expose open cuts or wounds to this product

**Ingestion:** Small amounts swallowed incidental to industrial handling are not likely to cause injury. Ingestion of larger amounts may cause stomach discomfort or pain

**Inhalation:** Prolonged or repeated exposure may cause injury to the respiratory tract

**Chronic effects:** Not a likely hazard

**Acute effects:** Not a likely hazard

**Cancer:** Not a likely hazard

**Birth defects:** Not available

**Reproductive effects:** Not available

**Mutagenic effects:** Not available

## 4. First aid measures:

**Eyes:** Flush with a continuous gentle stream of water for 5 minutes. If irritation develops, seek medical attention.

**Skin:** Wash with plenty of soap and water.

**Ingestion:** Do not induce vomiting unless instructed to do so by qualified medical personnel. If individual is conscious, give plenty of water to drink. Get medical attention if stomach discomfort develops.

**Inhalation:** Move individual to fresh air. Encourage coughing. Get medical attention if breathing difficulty develops.

**Note to physician:** Employ supportive care. Treatment should be based on the judgment of the physician in response to reactions of the patient.

## 5. Fire-fighting measures:

**Flash point:** Not applicable

**Explosive limits:** Not applicable

**Auto-ignition temperature:** 500°F/ 260°C

**Extinguishing media:** Use extinguishing media appropriate for controlling the surrounding fire.

**Sensitivity to mechanical impact/static discharge:** Dust generated may create an electrically conductive medium when mixed with air

**Unusual fire and explosion hazards:** None known.

**Fire-fighting equipment:** Wear positive-pressure self-contained breathing apparatus and full turn-out gear.

**Special fire fighting procedures:** Standard Fire: Caution, burning may continue inside bag after surface fire is out. Break bag to separate pile to assure the fire is extinguished. Take care to keep dusting to a minimum.

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## In Case of Emergency Call: 1-888-744-5662

Available 24 hours a day 7 days a week from April 1<sup>st</sup> to June 15<sup>th</sup>, otherwise available from 8:00am to 4:30pm CST, Monday to Friday.

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## 6. Accidental release measures:

Do not vacuum up spills of peat products since the dust can form an explosive mixture when mixed in air. Sweep up spills and store in a suitable container until proper disposal can be arranged.

## 7. Handling and storage:

Store any unused product in original unopened containers at temperatures below 20°C (68°F) away from sunlight, drafts and direct heat sources. Practice reasonable caution to avoid contact with this product. Avoid breathing dust if generated. Users should wash hands before eating, drinking, chewing gum, using tobacco or the toilet. Keep out of reach of children. Do not ship or store this product with food, feed, drugs or clothing

## 8. Exposure controls, personal protection and exposure limits:

**Penicillium bilaii:** Not available

**Mesorhizobium ciceri:** Not available

**Peat powder:** ACGIH TLV and OSHA PEL for respirable mass is 10 mg/m<sup>3</sup>; ACGIH TLV for total mass is 10 mg/m<sup>3</sup>; OSHA PEL for total mass is 15 mg/m<sup>3</sup>.

**Natural graphite:** Not available. Manufacturer recommends 2.5 mg/m<sup>3</sup>.

**Engineering controls:** Good ventilation is required.

**Breathing:** Use a NIOSH or MSHA approved air-purifying respirator if respiratory irritation is experienced.

**Protective clothing:** Wear clean body-covering clothing and impervious gloves when handling this product.

**Eyes:** Safety glasses with side shields are recommended.

**Other protection:** Washing facilities should be available.

## 9. Physical and chemical properties:

**Boiling point:** Not applicable

**Vapour pressure:** Not applicable

**Volatility:** Not applicable

**pH:** 6.2 - 7.2

**Appearance:** Fine black powder

**Odour:** Slight earthy odour.

**Coefficient of water/oil distribution:** Not available

**Bulk density:** Not available

**Evaporation rate:** Not applicable

**Solubility in water:** Not soluble

**Freezing point:** Not applicable

**Odour threshold:** Not available

**Melting point:** Not applicable

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**Physical state:** Solid

**Vapor density:** Not applicable

**Specific gravity:** Not available

## 10. Stability and reactivity:

**Incompatibility:** Acids, bases, oxidizers, reducers, disinfectants, fungicides, and/or biocides may inactivate.

**Hazardous decomposition products:** Thermal decomposition releases CO, CO<sub>2</sub>, hydrocarbons.

**Hazardous polymerization:** Does not occur

## 11. Toxicological information:

**Skin absorption:** Not available

**Ingestion:** Oral LD<sub>50</sub> is not available

**Inhalation:** Inhalation LC<sub>50</sub> is not available

## 12. Ecological information:

**Toxicity to bees:** Not available. Not a likely hazard

**Toxicity to fish:** Not available. Not a likely hazard

**Toxicity to birds:** Not available. Not a likely hazard

## 13. Disposal considerations:

This product may be disposed of by placement in any landfill approved for domestic waste.

## 14. Transportation information:

This product is not regulated as a hazardous material for all modes of transportation within the U.S. and Canada.

**Hazard class:** Not applicable

## 15. Regulatory information:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the Controlled Products Regulations.

**Proposition 65:** Contains no components subject to warning requirements

**Master reference:** On file

**MSDS status:** New MSDS

## 16. Other information:

**Prepared by:** M. Sonier

This information may not be adequate for every application and therefore it is up to the user to determine the suitability of this information based on conditions of use, storage or local regulations.

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