TagTeam® Peat Chickpea

Safety Data Sheet

Date of issue: 07/19/2019 Version: 2.0

SECTION 1 : Identification

1.1. Identification

Product form : Mixture

Trade name : TagTeam® peat phosphate-solubilizing and nitrogen-fixing inoculant for chickpea

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : *Penicillium* & *Mesorhizobium* Inoculant

1.3. Details of the supplier of the safety data sheet

Novozymes BioAg
3935 Thatcher Ave
Saskatoon, SK Canada S7R 1A3

Information Telephone Number : 1-888-744-5662

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

1.4. Emergency telephone number

Emergency number : 1-800-424-9300 (Chemtrec) 24 hours every day

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Comb. Dust H232 - May form combustible dust concentrations in air

Full text of H-statements: see section 16

2.2. Label elements

GHS-US labelling

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H232 - May form combustible dust concentrations in air

2.3. Other hazards

No additional information available

SECTION 3 : Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Components:

Penicillium bilaiae and *Mesorhizobium cicero* : < 1% w/w

Graphite : 5-6%

The specific chemical identity and/or concentration range is being withheld because it is trade secret information of Novozymes BioAg.

This mixture does not contain any substances to be mentioned according to the criteria of Appendix D to Regulations 29 CFR 1910.1200.

SECTION 4 : First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Allow breathing of fresh air. Allow the victim to rest. Encourage coughing. In all cases of doubt, or when symptoms persist, seek medical advice.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting unless directed to do so by medical personnel. Obtain emergency medical attention. Give water to drink if victim completely conscious/alert.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use. 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. This product may cause adverse effects to individuals allergic to molds and/or fungi and should not be used by immunocompromised and/or immunosuppressed individuals.

Symptoms/injuries after inhalation : Possible respiratory damage following repeated or prolonged inhalation.

Symptoms/injuries after eye contact : Contact may cause eye irritation.

Symptoms/injuries after ingestion : Small amounts swallowed incidental to industrial handling are not likely to cause injury. On ingestion in large quantities: stomach pain. Ingestion of used product may cause abdominal discomfort.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically

SECTION 5 : Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand. Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Explosion hazard : Accumulation of airborne dusts may present an explosion hazard in the presence of an ignition source.

Reactivity : Thermal decomposition generates : carbon oxides. hydrocarbons.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protective equipment for firefighters : As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Specific methods : Caution, burning may continue inside bag after surface is out. Break bag to separate pile to assure that the fire is extinguished. Take care to keep dusting to a minimum.

SECTION 6 : Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials. Collect all waste in suitable and labelled containers and dispose according to local legislation.

6.4. Reference to other sections

No additional information available

SECTION 7 : Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide adequate ventilation. Avoid dust formation. Avoid breathing dust. Avoid contact with eyes, skin, and clothing.

Hygiene measures : Wash hands thoroughly after handling. Handle in accordance with good industrial hygiene and safety practices.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from: Direct sunlight, Heat sources, Extremely high or low temperatures. Keep container closed when not in use. Keep away from food, drink and animal feeding stuffs.

Incompatible materials : Acids. Bases. Oxidizing agents. Reducing agents. Disinfectants, fungicides, and/or biocides may inactivate.

Storage temperature : < 20 °C (68ºF)

SECTION 8 : Exposure controls/personal protection

8.1. Control parameters

Graphite (7782-42-5)		
ACGIH	ACGIH TWA (mg/m³)	2 mg/m³ (all forms except graphite fibers-respirable fraction)
OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ (synthetic-total dust) 5 mg/m³ (synthetic-respirable fraction)

Peat (RR-01126-7)		
ACGIH	ACGIH TWA (mg/m³)	10 mg/m³ (respirable mass) 5 mg/m³ (total mass)
OSHA	OSHA PEL (TWA) (mg/m³)	10 mg/m³ (respirable mass) 5 mg/m³ (total mass)

8.2. Exposure controls

Appropriate engineering controls : Ensure adequate ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal protective equipment : Avoid all unnecessary exposure. Protective goggles. Gloves. Protective clothing. Insufficient ventilation: wear respiratory protection.

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Where exposure through inhalation may occur from use, approved respiratory protection equipment is recommended.

Other information : Do not eat, drink or smoke during use.

SECTION 9 : Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Black fine powder

Colour : Black

Odour : Slight earthy odour

Odour threshold : No data available

pH : 6.2 - 7.2

Melting point : Not applicable

Freezing point : Not applicable

Boiling point : Not applicable

Flash point : Not applicable

Relative evaporation rate (butyl acetate=1) : No data available

Flammability (solid, gas) : No data available

Explosive limits : Not applicable

Explosive properties : No data available

Oxidising properties	:	No data available
Vapour pressure	:	Not applicable
Relative density	:	No data available
Relative vapour density at 20 °C	:	Not applicable
Solubility	:	Water: Not soluble
Log Pow	:	No data available
Auto-ignition temperature	:	500ºF (260ºC)
Decomposition temperature	:	No data available
Viscosity	:	Not applicable
Viscosity, kinematic	:	Not applicable
Viscosity, dynamic	:	Not applicable

9.2. Other information

No additional information available

SECTION 10 : Stability and reactivity

10.1. Reactivity

Stable

10.2. Chemical stability

Stable

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur

10.4. Conditions to avoid

Direct sunlight. Heat sources. Extremely high or low temperatures.

10.5. Incompatible materials

Acids. Bases. Reducing agents. oxidizing agents. Disinfectants, fungicides, and/or biocides may inactivate.

10.6. Hazardous decomposition products

Thermal decomposition generates : Carbon monoxide. Carbon dioxide. hydrocarbons.

SECTION 11 : Toxicological information

11.1. Information on toxicological effects

Acute toxicity	:	Not classified (Based on available data, the classification criteria are not met)
Skin corrosion/irritation	:	Not classified (Based on available data, the classification criteria are not met) pH: 6.2 - 7.2
Serious eye damage/irritation	:	Not classified (Based on available data, the classification criteria are not met) pH: 6.2 - 7.2
Respiratory or skin sensitisation	:	Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	:	Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	:	Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	:	Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (single exposure)	:	Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (repeated exposure)	:	Not classified (Based on available data, the classification criteria are not met)

Aspiration hazard	:	Not classified (Based on available data, the classification criteria are not met)
Symptoms/injuries after inhalation	:	Possible respiratory damage following repeated or prolonged inhalation.
Symptoms/injuries after eye contact	:	Contact may cause eye irritation.
Symptoms/injuries after ingestion	:	Small amounts swallowed incidental to industrial handling are not likely to cause injury. On ingestion in large quantities: stomach pain. Ingestion of used product may cause abdominal discomfort.

SECTION 12 : Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

TagTeam® Peat Chickpea	
Persistence and degradability	Not established

12.3. Bioaccumulative potential

TagTeam® Peat Chickpea	
Bioaccumulative potential	Not established

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on ozone layer	:	No additional information available
Effect on the global warming	:	No additional information available
Other information	:	Avoid release to the environment.

SECTION 13 : Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations	:	Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	:	Avoid release to the environment.

SECTION 14 : Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated for transport

TDG

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15 : Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

No additional information available

National regulations

TagTeam® Peat Chickpea
This material is considered hazardous according to the criteria of the US OSHA Hazard Communication Standard (29 CFR 1910.1200).

15.3. US State regulations

California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Abbreviations and acronyms : ACGIH (American Conference of Government Industrial Hygienists). ATE - acute toxicity estimate. CAS - Chemical Abstracts Service. GHS - Globally Harmonised System. HCS - Hazard Communication Standard. OSHA - Occupational Safety and Health Administration. PEL- Permissible Exposure Level. STEL- Short-Term Exposure Limit. TWA- Time Weighted Average.

Other information : None

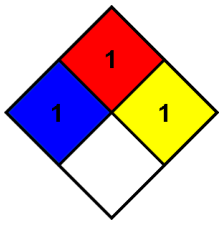
Full text of H-statements:

Comb. Dust	Combustible Dust
H232	May form combustible dust concentrations in air

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard : 1 - Must be preheated before ignition can occur.

NFPA reactivity : 1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.



This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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