

Material Safety Data Sheet

Section 1. Product and Company Identification

Product Name: NODULATOR® PEAT-BASED GRANULAR INOCULANT
Product Code: SJ/PGND

Manufacturer Information: Becker Underwood, Inc.
 801 Dayton Avenue
 Ames, Iowa 50010
 Information Phone: (515) 232-5907
 Emergency Phone: Chemtrec (800) 424-9300 or 703 527 3887 (international)

Hazardous Material Information System:

Health	1
Flammability	1
Physical Hazard	0
Personal Protection	X

Section 2. Hazard Identification

Emergency Overview: May cause respiratory tract, eye, and skin irritation.

Potential Acute Health Effects:

- Eyes:* Short term harmful effects are not expected. However, prolonged or repeated contact may result in irritation.
- Skin:* Short term harmful effects are not expected. However, prolonged or repeated contact may result in irritation.
- Inhalation:* Short term harmful effects are not expected. However, prolonged inhalation may lead to respiratory tract irritation.
- Ingestion:* Not an intended route of exposure. Short term harmful effects are not expected. However, ingestion of large quantities may be harmful. Rhizobia are soil bacteria that are not pathogenic to plants or humans.

Section 3. Composition/Information on Ingredients

The composition of this material is a trade secret. Contains no other components or impurities which will influence the classification with regard to human and environmental risk assessment.

Section 4. First Aid Measures

- Eye Contact:** Immediately flush eyes with water for at least 15 minutes. Prolonged or repeated contact may result in mechanical irritation. Seek medical attention.
- Skin Contact:** Wash with soap and water. If irritation develops consult a physician. Remove and launder contaminated clothing before reuse.
- Inhalation:** If difficulty in breathing occurs, move to fresh air. Seek medical attention if irritation persists.
- Ingestion:** Seek medical attention. Treat as if soil was ingested.

Section 5. Fire Fighting Measures

- Flammability of Product:** Not a fire or explosion hazard when stored under normal conditions.
- Fire Fighting Media:** Foam, alcohol foam, CO2, dry chemical, water fog
- Protective Clothing:** No special procedures required besides standard fire fighting procedures.

Section 6. Accidental Release Measures

- Clean-Up Procedures:** Vacuum or scoop up material and place in properly labeled and closed container. Dispose of collected material according to federal, state/provincial and local environmental regulations.
- Spills and Leaks:** Contain the spill to prevent discharges to surface streams or storm sewers. Material is non-hazardous.

Section 7. Handling and Storage

- Handling:** General mechanical ventilation can be expected to effectively remove and prevent build up of any dust generated from handling this product in a closed environment. Do not freeze. Protect eyes to prevent contact. Avoid prolonged or repeated exposure to skin.
- Storage:** Store in a cool dry place away from children or animals. Do not freeze. Keep containers sealed until ready for use.

Section 8. Exposure Control/Personal Protection

Hazardous Components		Occupational Exposure Limits		
Component	CAS Number	OSHA PEL	ACGIH TLV	Weight Percent
Soil humus and rhizobium bacteria	Proprietary	NE	NE	100%
Rhizobia are soil bacteria that are not pathogenic to plants or humans.				
No reportable quantities of toxic chemical(s) subject to the reporting requirements of Section 313 of SARA Title III and of 40 CFR 372 are present				

- Engineering controls:** General mechanical ventilation can be expected to effectively remove and prevent build up of any dust generated from handling this product in a closed environment.
- Personal Protection:**
- Eyes:* Safety glasses are recommended. Have an eye wash station available.
 - Body:* To prevent skin contact use coveralls, apron, boots, or lab coat.
 - Hands:* Avoid skin contact by using chemically resistant gloves.
 - Respiratory:* Use local exhaust to control excessive dust. If excessive dust is present, use appropriate NIOSH/MSHA approved respirator.
- Other:** Open wounds or skin surface disruptions should be covered with a chemical resistant patch to minimize absorption risks. Clean clothing should be worn daily to avoid possible long-term build up of the product leading to chronic overexposure.

Section 9. Physical and Chemical Properties

Odor	Soil odor	Vapor Density	NA
Color	Black	Evaporation Rate	NA
Physical state	Light weight solid	Specific Gravity (H₂O = 1)	NA
pH	NA	Solubility	Insoluble
Melting/Freezing Point	NA		

Section 10. Stability and Reactivity

Chemical Stability:	This material is chemically stable under normal storage and handling conditions.
Hazardous Decomposition:	When involved in a fire, burning may evolve noxious fumes which may include carbon monoxide, carbon dioxide, nitrous oxides, acetic acid, or other toxic compounds depending on the chemical composition and combustion conditions.
Hazardous Polymerization:	Is not known to occur.
Incompatibility (Materials to Avoid):	Long term storage in direct contact with reactive metals such as aluminum, zinc, copper, nickel, magnesium, etc. Other materials to avoid include strong oxidizing agents, disinfectants, biocides. Avoid extremes in temperature.

Section 11. Toxicological Information

Chronic Toxicity:	None known
Mutagenic Effects:	None known
Teratogenic Effects:	None known
Developmental Toxicity:	None known
Acute Effects on Humans:	May cause skin, eye, and respiratory irritation.
Sensitization:	Repeated or prolonged exposure to the substance at concentration above the exposure limits may cause respiratory tract and lung sensitization.
Carcinogenic Effects:	This material is not known to cause cancer in animals or humans. Rhizobia are soil bacteria that are not pathogenic to plants or humans.
Existing Medical Conditions Aggravated By Exposure:	May provoke asthmatic response in persons with asthma who are sensitive to airway irritants.

Section 12. Ecological Information

Ecotoxicity:	No data available, however the material is not expected to have any deleterious toxic effect.
Environmental Fate:	No data available regarding the environmental fate or biodegradation.

Section 13. Disposal Considerations

EPA Waste Number:	Non-hazardous waste
Treatment:	Dispose of according to all federal, state/provincial and local environmental regulations.

Section 14. Transport Information

D.O.T. Classification:	Not regulated
IMO/IMDG Classification:	Not regulated
IATA Classification:	Not regulated

Section 15. Regulatory Information

US Federal Regulations:

Product Information: This product is not considered hazardous.

SARA 311/312:

Acute: No
Chronic: No
Fire: No
Pressure: No
Reactive: No

SARA 313: No reportable quantities of toxic chemical(s) subject to the reporting requirements of Section 313 of SARA Title III and of 40 CFR 372 are present.

Regulatory Listings

United States (TSCA): Listed

Canada (CEPA,DSL): Listed

Section 16. Other Information

Revision:	3
Revision date:	February 10, 2011
Supersedes:	January 4, 2010

The information is furnished without warranty, representation, inducement or license of any kind, except that it is accurate to the best Becker Underwood's knowledge. Because use conditions and applicable laws may differ from one location to another and may change with time, Recipient is responsible for determining whether the information is appropriate for recipient's use. Since Becker Underwood has no control over how this information may be ultimately used, all liability is expressly disclaimed and Becker Underwood assumes no liability.

NODULATOR® is a Registered Trademark of Becker Underwood.