



Safety Data Sheet

1. Product and Company Identification

Product Name: **Granular Plus Mycorrhizae**
Material Uses: Microbe food

(M)SDS#: Granular Plus -20190311
Validation Date: March-11-2019
Supplier/Manufacturer: GreenGro, LLC
PO Box 976
Windsor, California (CA) 95492, U.S.A.
Phone number: (866) 884-6803 (Mon – Fri; 8:30am to 4:30pm PST)
E-mail: admin@thegreengro.com
Website: www.thegreengro.com

In case of emergency: Contact your local emergency response services

2. Hazards Identification

CLASSIFICATIONS ARE ACCORDANCE TO THE **GHS** CLASSIFICATION REQUIREMENTS UNDER **29 CFR 1910.1200**

GHS CLASSIFICATION OF SUBSTANCE OR MIXTURE:

Skin corrosion/irritation:	Category 2, H315	Eye damage/irritation:	Category 2, H319
Specific Target Organ Toxicity – Single exposure (Respiratory Tract):	Category 3, H335		

HAZARD SYMBOLS:



SIGNAL WORDS: Warning

HAZARD STATEMENTS:

H315 Causes skin irritation. H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

PRECAUTIONARY STATEMENTS:

PREVENTION: P261 Avoid breathing dust/fume/gas/mist/vapors/spray
P264 Wash face, hands, and any exposed skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

RESPONSE: P302+P352+P362+P364 IF ON SKIN: Wash with plenty of water. Take contaminated clothing and wash before reuse.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P304+P340+P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER and/or doctor if you feel unwell.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.

STORAGE: P403+P233 Store in a well-ventilated place. Keep the container tightly closed.
P405 Store locked up.

DISPOSAL: P501 Dispose of contents and containers in accordance with local, regional and international regulations.

Precautionary statements are listed according to the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS) – Annex III

See toxicological information (section 11)

General Information: Read entire SDS for a more thorough evaluation of the hazards

3. Composition / Information on Ingredients

Name	CAS Number	%
Zeolites	308081-08-5	60 - 80
Mycorrhizae	NA	< 1
Bacillus blend (B. subtilis, B. licheniformis, B. amyloliquefaceans, B megaterium)		8.0 x 10 ⁷ CFU/g

Amounts specified are typical and do not represent a specification. Remaining components are proprietary, non-hazardous, and/or present at amounts below reportable limits.

4. First Aid Measures

Eye Contact:	Flush eyes with plenty of water. Remove contact lenses, if present and easy to do. If symptoms develop and/or persist seek medical attention.
Skin Contact:	Wash affected areas with soap and water. Remove contaminated clothing & wash before reuses. If symptoms develop and/or persist seek medical attention.
Inhalation:	Move the exposed person to fresh air and keep at rest in a position comfortable for breathing. If symptoms develop and/or persist seek medical attention. If not breathing, give artificial respiration or oxygen. If breathing is difficult, transport to medical care and, if available, give supplemental oxygen. Loosen tight clothing such as a collar, tie, belt, or waistband.
Ingestion:	Rinse mouth with water and drink 1-2 glasses of water in small sips. Do not induce vomiting until direct to do so by medical personnel. Never give anything by mouth to an unconscious person. Seek immediate medical advice.
Note to physician:	No specific treatment. Treat symptomatically. Call the poison control center if large quantities were ingested.

5. Fire-Fighting Measures

Flash point:	No data available.
Hazardous Thermal Decomposition Products:	Decomposition products may include the following materials: carbon dioxide, carbon monoxide, other oxides, smoke, and irritating combustion products. Under fire conditions this product may emit toxic and/or irritating fumes, smoke, and gases.

Extinguishing Media:	Regular dry chemical, carbon dioxide, water spray. For large fires use regular foam or flood fire with fine water spray.
Unsuitable Extinguishing Media:	High-pressure water streams.
Special Exposure Hazards:	Promptly isolate the scene by removing all persons from the vicinity of the fire. No actions shall be taken involving any personal risk or without suitable training. Combustible dust. High concentrations of product dust from this product may burn explosively if ignited by static charges or other ignition sources. The conditions under which this may occur are not readily predictable. Avoid flames, sparks, and other sources of ignition. Ground any equipment in handling.
Special Protective equipment for fire-fighters:	No special requirements. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental Release Measures

Personal Precautions:	No actions shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering the area. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in the hazard area. Avoid breathing vapor or mist and provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
Environmental Precautions:	Avoid dispersal of spilled material and runoff that leads to contact with waterways, drains, and sewers. Inform the relevant authorities if the product has caused environmental pollution.
Methods of Clean Up:	Stop leak if without risk. Move containers from the spill area. Avoid generating dust. When dust is generated it may overexpose cleanup personnel to respirable dust. Wetting of the material is recommended. Avoid dry sweeping and use NIOSH approved respirators for conditions where dust levels exceed the exposure limits. Avoid heat, flames, sparks, and other sources of ignition. Eliminate all sources if safe to do so. All equipment used when handling the product must be grounded. Approach spill from up wind if possible. Prevent spill from entering sewers, rivers and other water courses, basements, or confined areas. Wash into an effluent treatment plant or proceed as follows. Dilute with plenty of water. Contain and collect spillage with non-combustible, absorbent material (e.g. sand, earth, vermiculite, or diatomaceous earth) and place it in container for disposal according to local regulations. Use clean non-sparking tools to collect the material. Dispose of product in accordance with local and national regulations. Contaminated absorbent material may pose the same hazard as the spilled product. If respirable dusts are generated, respiratory protection may be needed.

7. Handling and Storage

Handling:	Wear appropriate personal protective equipment (see Section 8) when handling. Eating, drinking, and smoking should be prohibited in areas where chemicals are handled, stored, or processed. Workers should wash hands and face before eating, drinking, and smoking. Keep all containers tightly closed when not in use. Empty containers retain product residue and should be disposed of properly. Do not reuse empty containers for other purposes or to hold other materials. Routine housekeeping should be instituted to ensure that dust does not accumulate on surfaces. Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Prevent buildup of mists or vapors in the work atmosphere.
Storage:	Store in accordance with local regulations. Store in a cool, dry, well-ventilated area, out of direct sunlight, away from heat and ignition sources. Keep containers closed when not in use, securely sealed and protect against physical damage. Inspect regularly for deficiencies such as damage or leaks. Take precautions against static electricity discharges. Use proper grounding procedures. Avoid contact with temperatures above 90°F (32°C). Avoid generating dust.

8. Exposure Controls / Personal Protection

Component	Exposure Limits
Nuisance Dust	OSHA PELV: 15 mg/m ³ (total dust); 5 mg/m ³ (respirable)
Recommended Monitoring Procedures:	If this product contains ingredients with exposure limits, personal, workplace, atmospheric, or biological monitoring may be required to determine the effectiveness of the ventilation system or other control measures and/or to determine whether it is necessary to use respiratory protective equipment. Consider European Standard EN 689 or similar industry or governmental guidelines for appropriate methods for the assessment of exposure by inhalation to chemical agents and/or hazardous substances.
Engineering measures:	No special ventilation requirements are necessary for this product. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure below the recommended or statutory limits
Hygiene measures:	Wash hands, forearms, and face thoroughly after handling any chemical products, and before eating, smoking, and using the lavatory and at the end of the work period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protection

Respiratory:	A respiratory protection program in compliance with 29CFR1910.134, or other applicable regulatory standards must be followed whenever exposure limits may be exceeded. If engineering controls are not feasible, or if inadequate ventilation wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Hands:	Wear appropriate protective gloves and clothing to prevent skin exposure; consider European Standard EN374 or similar industry or governmental guidelines. Consider the parameters specified by the glove manufacture and check gloves during use to ensure they are retaining their protective properties. Gloves selected must have a breakthrough rating appropriate for the work shift. If a risk assessment indicates that it is necessary, gloves should always be worn when handling chemical products.
Eyes:	When a risk assessment indicates, safety eyewear complying with an approved standard, such as OSHA Standard 29CFR1910.133 or European Standard EN166, should be used to avoid exposure to liquid splashes, mists, or dusts. If contact is possible, at a minimum use chemical splash goggles. If significant splash hazards may occur, consider using a full-face shield.
Skin:	Personal Protective equipment for the body should be selected based on the task being performed and the risks involved. Typical protective equipment includes non-absorbent lab coats, disposable protective sleeves, coats, or whole-body suits. Consider CFR1910.132 and CFR1910.136 for OSHA approved standards on protective clothing and footwear. Consider seeing a safety specialist to determine the appropriate level of protection for your task.
Environmental Exposure Controls:	Emissions from ventilation or work processes should be checked to ensure they comply with the requirements of environmental regulations. In some cases, fume scrubbers, filters, or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and Chemical Properties

Appearance:	Dark grainy solid	Odor	Earthy odor
Boiling Point:	Not determined	Freezing Point:	Not determined
Flash Point:	Not determined	pH:	Not determined
Auto-ignition Temperature:	Not determined	Flammable Limits:	Not determined
Vapor Pressure:	Not determined	Water Solubility:	Not determined
Specific Gravity:	Not determined	Vapor Density:	Not determined
Evaporation Rate:	Not determined	VOC:	Not determined

10. Stability and Reactivity

Chemical Stability:	This product is stable, under normal conditions of storage and use, hazardous reactions will not occur.
Hazardous Polymerization:	Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to Avoid:	Avoid generating dust. Heat, open flames, sparks, direct sunlight, and other sources of ignition. Avoid contact with oxidizing agents, exposure to moisture, and strong acids. Elevated storage temperature.
Hazardous Decomposition:	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition products may include the following materials: carbon dioxide, carbon monoxide, other oxides, smoke, and irritating combustion products. Under fire conditions this product may emit toxic and/or irritating fumes, smoke, and gases.

11. Toxicological Information

<u>Acute Toxicity</u>

Product/Ingredient Name	Test	Endpoint	Species	Result
No data available				

<u>Irritation / Corrosion</u>

Product/Ingredient Name	Test	Species	Result
No data available			

<u>Sensitizer</u>

Product/Ingredient Name	Test	Species	Result
No data available			

<u>Mutagenicity</u>

Product/Ingredient Name	Test	Result
No data available		

Conclusion/ Summary: No data available

<u>Carcinogenicity</u>

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, ACGIH, NTP or OSHA.

<u>Reproductive Toxicity</u>

Product/Ingredient Name	Test	Species	Maternal Toxicity	Fertility	Developmental Effects
No data available					

<u>Teratogenicity</u>

Product/Ingredient Name	Test	Species	Results
No data available			

<u>Potential Acute Health Effects</u>

Inhalation:	Inhalation of dust may irritate the upper respiratory tract.
Ingestion:	May irritate the gastric tract causing nausea and vomiting.
Skin Contact:	Causes skin irritation. Repeated skin exposure to this product may result in skin irritation and if persistent, dermatitis which may become infected.
Eye Contact:	Causes serious eye irritation. Overexposure to eyes may also cause immediate discomfort, pain, and mild but transient corneal injury.

<u>Potential Chronic Health Effects</u>

Product/Ingredient Name	Test	Endpoint	Species	Results
No Data Available				

General:	Once sensitized, an allergic reaction may occur when subsequently exposed to very low levels.
Target Organs:	No known significant effects or critical hazards
Carcinogenicity:	No known significant effects or critical hazards
Mutagenicity:	No known significant effects or critical hazards
Teratogenicity:	No known significant effects or critical hazards
Developmental Effects:	No known significant effects or critical hazards
Fertility Effects:	No known significant effects or critical hazards

12. Ecological Information

Environmental Effects: This product is not an environmental hazard.

Aquatic Ecotoxicity

Product/Ingredient Name	Test	Endpoint	Exposure	Species	Result
No data available					

Persistence and Degradability

Product/Ingredient Name	Test	Period	Result
No data available			

Product/Ingredient Name	Aquatic half-life	Photolysis	Biodegradability
No data available			

Bioaccumulative potential

Product/Ingredient Name	Log P _{ow}	BCF	Potential
No data available			

Other adverse effects: No known significant effects or critical hazards
Other information: BOD5: Not determined COD: Not Determined TOC: Not determined

13. Disposal Consideration

Waste Disposal Method: Disposal of these products, solutions, and by-products should always comply with the requirements of environmental and waste disposal legislation and any regional or local authority requirements. Dispose of surplus, non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer system unless this is compliant with all applicable laws and regulations. Incineration by an approved and licensed contractor is the most common disposal method. Packaging materials that and absorbents containing the product can typically be landfilled or incinerated. Contact local authorities to determine the proper means of disposal in your area.

14. Transport Information

Not regulated for transportation purposes under DOT, IATA, or IMDG standards

15. REGULATORY INFORMATION

US Federal Regulations:

Occupational Safety and Health Act (OSHA): This product is a hazardous chemical under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

SARA Title III: Section 304 - CERCLA: This product does not contain chemicals regulated under Section 304 as extremely hazardous substance(s) for emergency release notification ("CERCLA" List):

SARA Title III: Section 311/312 - Hazard Communication Standard (HCS): Per the June 13, 2016 Federal Register, EPA harmonized the EPCRA 311/312 hazard categories with 2012 OSHA hazard communication standard for classifying and labeling of chemicals (i.e. GHS). Please refer to section 2 of the SDS to identify the appropriate hazard categories for reporting purposes.

SARA Title III: Section 313 Toxic Chemical List (TCL): This product does not contain a toxic chemical for routine annual Toxic Chemical Release Reporting under section 313 (40 CFR 372).

TSCA Section 8(b) - Inventory Status: All chemical(s) comprising this product are listed or exempt on the TSCA inventory.

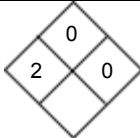
State Regulations:

California Proposition 65: This product does not contain any chemicals currently on the California list of Known Carcinogens and Reproductive Toxins.

International Regulations:

WHMIS: Class D-2B: Material causing other toxic effects

16. OTHER INFORMATION

Hazardous Material Information System (HMIS) - USA		National Fire Protection Association (USA):	
Health	2		
Flammability	0		
Physical Hazards	0		
Personal Protection	C*		

*suggested minimum personal protection equipment. End users must determine appropriateness of these suggestions for their applications and usage conditions.

Approximate HMIS & NFPA Risk Rating Legend: 0 (low or none); 1 (slight); 2 (Moderate); 3 (Serious); 4 (Severe)

MSDS No: Granular Plus -20190311 **Reason Issued:** update
Prepared By: EHS Department

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