

May be used to comply with Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, 29 CFR 1910.1200, Standard must be consulted for specific requirements (non-mandatory form) Form Approved OMB No. 1218-0072

Date Prepared: 01-15-2019

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Section 1: Identification of the Substance/Preparation and of the Company/Undertaking

1.1 Product Identifier

Trade Name: SoilBiotics 21-17 (for conventional use)

Synonyms: Gypsum, Calcium Sulfate Dihydrate, Flue Gas Desulfurization

Relevant Identified Uses of the Substance or Mixture and Uses Advised Against It

Recommended Uses: Plant Nutrient, Soil Amendment/Conditioner

Inadvisable Uses: Contact state and local agricultural extension agents

1.2 Details of the Distributor of the Safety Data Sheet

Distributed By: SoilBiotics

2902 West State Route 17

Kankakee, IL 60901

815-929-1752

Country: United States

1.1 In Case of Emergency: USA, Canada, Mexico call Infotrac at 1-800-535-5053
International call Infotrac at 1-352-323-3500

Section 2: Hazards Identification

2.1 GHS Classification: Not Classified

2.2 Label Elements: No pictogram, signal word or precautionary statement are applicable.

2.3 Other Hazards: None known. Product incorporates dust control agent that mitigates the presence of respirable dust.

Section 3: Composition/Information on Ingredients

3.2 Mixtures

Substance	CAS No	Hazard Classification
Synthetic Gypsum (calcium sulfate dihydrate)	10101-41-4	Specific target organ toxicity – single exposure (respiratory effects)
Ammonium Lignosulfonate (stabilizer)	8061-53-8	Eye irritant category 2B and Skin irritant category 2

Please see Section 16 for the full text of R-Phrases and H-Phrases

Section 4: First Aid Measures

4.1 Description of First Aid Measures

Inhalation: Seek fresh air, wash out mouth with water and blow nose thoroughly.

Ingestion: No specific first aid measures are required.

Skin Contact: Wash the skin with soap & water.

Eye Contact: Remove contact lenses, flush with water (preferably using eye wash equipment) for 15 minutes until irritation subsides.

Seek medical advice if symptoms persist.

Acute Effects: None known

Chronic Effects: None known

Section 5: Fire-Fighting Measures

5.1 Special Fire Fighting Procedures: Wear appropriate self-contained breathing apparatus, NIOSH approved or equivalent, and full protective gear.

5.2 Fire and Explosion Hazards: Poses no fire-related hazard.

5.3 Suitable Extinguishing Media: Use extinguishing media appropriate for fighting surrounding fire.

5.4 Unsuitable Extinguishing Media: N/A – this product is not flammable or combustible.

5.5: Specific Hazards: Poses no fire-related hazard.

5.6: Hazardous Combustion Products: Above 145 C this product can produce sulfur dioxide and calcium dioxide (SO₂ and CaO)

Section 6: Accidental Release Measures

6.1 Personal Precautions: None

6.2 Methods and Materials for Containment and Cleaning Up: Avoid generating dust. Shovel up spilled material and place in suitable container. Prevent contamination of drains or waterways. Dispose of in accordance with federal, state, local requirements.

6.3 Emergency Procedures: Contain spill area and protect from pedestrian or vehicle traffic. Use scooping, water spraying/flushing/misting or ventilated vacuum cleaning systems to clean up spills. Do not use pressurized air.

6.4 Protective Equipment: Use personal equipment as recommended in Section 8. For airborne concentrations exceeding OELs, use a self-contained breathing apparatus.

Section 7: Handling and Storage

7.1 Precautions for Safe Handling: Practice good housekeeping. Minimize dust generation and accumulation. Avoid contact with skin and eyes. Wash or vacuum clothing that becomes dusty. Avoid eating, smoking, or drinking while handling material.

Section 8: Exposure Controls/Personal Protection

8.1 Control Parameters: Occupational Exposure Limit:

Chemical Name	OSHA PEL (mg/m ³)	NIOSH REL TWA (mg/m ³)	CA-OSHA PEL (mg/m ³)
Gypsum (calcium sulfate) Based on particles not Otherwise regulated (PNOR): Total Dust	15	10	10
Gypsum (calcium sulfate) Based on PNOR: Respirable Fraction	5	5	5

8.2 Exposure Controls:

Engineering Controls: Nothing special required. Ventilate to keep airborne concentrations below exposure limits. Use of an enclosed tractor cab with particulate air filtration could reduce the risk of inhaling dust and solids during application or moving product.

Personal Protective Equipment:

Eye Protection: Wear safety goggles with side shields. Avoid contact lenses.

Skin Protection: Wear gloves and protective clothing. Wash hands with soap and water after contact with product.

Respiratory Protection: Work with product in adequate ventilation/personal protection. OSHA Regulations must be followed (29 CFR 1910.134 Respiratory Protection). A NIOSH approved particulate respirator is recommended when engineering controls are not feasible, or while engineering controls are being instituted and if an OSHA PEL or ACGIH TLV is exceeded.

Personal Hygiene: Work clothing should be washed regularly. Wash hands before eating, drinking, or using tobacco products. Wash exposed skin with soap and water.

Section 9: Physical and Chemical Properties

9.1 Physical State/Appearance/Odor: Solid, Granular; greyish brown with no odor

9.2 Information on Basic Physical and Chemical Properties:

Parameter	Value/Unit	Remark
Corrosivity towards Steel	0.56 millimeters per year	
pH	7 - 8 but may be as low as 4 in solution	
Melting Point	Not Applicable	
Initial Boiling Point	Not Applicable	
Freezing Point	Not Applicable	
Flash Point	Not Applicable	
Evaporation Rate	Not Applicable	
Flammability (solid, gas)	Not Applicable	
Flammability Limits	Not Applicable	
Explosion Limits	Not Applicable	
Vapour Pressure	Not Applicable	
Vapour Density	Not Applicable	
Specific Gravity	2.19 g/cc	
Partition Coefficient N-Octanol/Water	Not Applicable	
Auto-Ignition Temperature	Not Applicable	
Decomposition Temperature	1450 C	
Viscosity	Not Applicable	
Odor Threshold/Odor	NA/None	
% Volatiles by Weight		
Bulk Density (g/ml)		
Dry Matter, %		
Solubility in Water		

Section 10: Stability and Reactivity

10.1 Reactivity: Avoid contact with strong acids and strong oxidizers

10.2 Chemical Stability: Stable in dry environments

10.3 Possibility of Hazardous Reactions: Contact with strong acids could result in release of carbon dioxide

10.4 Conditions to Avoid: Contact with incompatible materials

10.5 Incompatible Materials: Strong Acids, Aluminum (at high temperatures), diazomethane

10.6 Hazardous Decomposition Products: No hazardous decomposition up to 1450 C. Above 1450 C it could decompose to calcium oxide (CaO) and releases sulfur dioxide (SO₂) and various carbon oxides.

Section 11: Toxicological Information

Note: No specific data is available for the product as a whole. This information pertains to calcium sulfate dihydrate which composes over 90% of the product.

Carcinogenic Properties: None known

Animal Data Results

Acute Oral Toxicity

Species: Rat (Sprague-Dawley)

No mortality, no specific clinical signs observed during test period. LD 50 (lethal dose): >2,000 mg/kg body weight

Skin Irritation

Species: Rabbit (New Zealand White)

Result: Not irritating

Skin Sensitization

Specie: Guinea pig (Hartley)

Result: Not sensitizing

No acute inhalation, toxicity, acute dermal toxicity, corrosiveness/irritation, or eye irritation corrosion studies are available for calcium sulfate dihydrate. Mutagenicity studies and Reproduction/Developmental Toxicity Screening Tests were negative.

Section 12: Ecological Information

12.1 Toxicity: no data available on final product

12.2 Persistence and Degradability: not relevant for inorganic materials

12.3 Bioaccumulative Potential: No data available

12.4 Mobility in Soil: Solubility in water: No data available

12.5 Results of PBT and vPvB Assessment: No data available

12.6 Other Adverse Effects: None known

Section 13: Disposal Considerations

13.1 Waste Treatments Methods: Recover or recycle if possible. Disposal should be in accordance with applicable local, regional, and national laws and regulations.

Section 14: Transport Information

14.1 UN-No: Not classified as a hazardous material by the US Department of Transportation

14.2 UN Proper Shipping Name: NA

14.3 Transport Hazard Class(es): NA

14.4 Packaging Group: NA

14.5 Environmental Hazards: NA

Section 15: Regulatory Information

TSCA Inventory Status – All components of this product are listed on the TSCA Inventory or are exempt from TSCA Inventory requirements

Section 16: Other Information

16.1 HMIS Rating (0-4): Health=0 Fire=0 Reactivity=0 Special=0

Prepared by: SoilBiotics

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