



DeTerra 365 Safety Data Sheet

Revised 04-14-2025

1. IDENTIFICATION

Product Name:	DeTerra 365™
Identity:	Calcium montmorillonite clay
Description:	Member of the group of smectite clays.
Recommended Use:	Feed additive. Adsorbent or absorbant. Pelleting aid or flow agent.
Manufactured For:	Papillon Agricultural Company
Address:	114 S. Washington Street, Suite 104, Easton, MD 21601 USA
Contact Information:	Telephone: (800) 888-5688 Fax: (410) 822 0429
Emergency Phone:	(443) 496-1286

2. HAZARD(S) IDENTIFICATION

Hazard Classification:	Carcinogen 1A (due to presence of crystalline silica)
Hazard Statement:	Excessive inhalation of dust may cause irritation of nose, throat, and respiratory passages. May cause damage to organs (immune system, kidney, lung) through prolonged or repeated exposure (inhalation). Use appropriate respiratory protection and gloves. Dust may irritate eyes (mechanical irritation). Flush from eyes with water. Safety glasses are recommended.
Fire & Explosion Hazard:	Noncombustible
Other Hazards:	Depending on the handling and use of the product, airborne respirable dust may be generated. Dust may contain respirable crystalline silica. Prolonged and massive inhalation of respirable crystalline silica dust may cause lung fibrosis. Occupational exposure to respirable dust should be monitored.
Reactivity Data:	Stable; no hazardous polymerization or decomposition products.

3. COMPOSITION/ INFORMATION

Chemical Name:	Calcium montmorillonite
Common Synonyms:	Smectite
Chemical Abstract Registry Number:	1318-93-0

Chemical Formula: Ca aluminosilicate

Impurities/ Additives: None. May contain less than 5% crystalline silica, CAS 14808-60-7.

4. FIRST AID MEASURES

Inhalation: Excessive inhalation may cause irritation; move to a well-ventilated area. If breathing difficulties develop, aid in breathing and seek immediate medical attention.

Skin Contact: Wash thoroughly with soap and water if contact with skin occurs. If symptoms persist, seek medical attention.

Eye Contact: Rinse eyes immediately with plenty of water. If symptoms persist, seek medical attention.

Ingestion: No hazards anticipated. If large quantities are ingested, seek medical attention.

5. FIRE-FIGHTING MEASURES

Fire & Explosion Hazard: Noncombustible and not explosive. Use extinguishing measures suitable for the surrounding areas. Material can be slippery when wet.

6. ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures: Sweep or vacuum spilled material. Avoid dust formation, reduce dust by wetting. Material can be slippery when wet. Reclaim for use if possible.

Environmental Precautions: Discharge into the environment should be avoided.

Waste Disposal: Dispose of material as inert non-metallic mineral. Do not dispose in sewers or waterways.

7. HANDLING AND STORAGE

Safe Handling: Use appropriate respiratory protection equipment. Avoid dust formation. Ensure adequate ventilation. Safety glasses and gloves are recommended. Material can be slippery when wet.

Safe Storage Conditions: Store in a dry place to maintain free-flowing properties. Containers should be stored tightly sealed in a dry place. No restrictions on storage with other products.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Exposure Limits: Components with occupational exposure limits: crystalline silica

OSHA PEL - TWA value 0.05 mg/m³ (respirable dust);
OSHA Action level 0.025 mg/m³ (respirable dust);
ACGIH TVL – TWA value 0.025 mg/m³ respirable fraction.

Total dust:

OSHA TWA 5 mg/m³ respirable fraction, 15 mg/m³ total dust
Limits are expressed as eight-hour time-weighted averages (TWA)

Personal Protective Measures: Respiratory protection - A NIOSH-certified (or equivalent) particulate respirator. Observe OSHA regulations for respirator use (29 CFR 1910.134). Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit.

Hand protection - Protective gloves. Wash dust-exposed skin with soap & water before eating and drinking. Eye/ face protection- Safety glasses with side-shield.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Off-white to cream color
Odor/ Odor Threshold:	None
Melting Point:	Not Applicable
Flash Point:	Not Flammable
Flammability/ Limits:	Not Flammable/ Not applicable
Autoignition:	Not Applicable
Vapor Pressure:	Not Applicable
Bulk Density:	550-750 kg/m ³
Vapor Density:	Not Applicable
Self-ignition Temp:	Not flammable/ not self-igniting
Solubility:	Insoluble in water
Specific Gravity:	2.5

10. STABILITY AND REACTIVITY

Reactivity:	No hazardous reactions if stored and handled as prescribed/indicated. No corrosive effect on metal. Not fire-propagating.
Chemical Stability:	Chemically stable
Other:	No hazardous reactions if stored and handled as prescribed/indicated. Avoid dust formation
Incompatible Materials:	None Known.
Hazardous Decomposition Products:	None Known. No thermal decomposition if correctly stored and handled.

11. TOXICOLOGICAL INFORMATION

Likely exposure routes:	Ingestion, inhalation, eye, or skin contact.
Acute Toxicity/ Effects:	Virtually nontoxic after a single ingestion, inhalation, or after a single skin contact. Inhalation of dust may cause respiratory tract irritation, coughing and breathing difficulties. Contact with the eyes or skin may cause mechanical irritation. No sensitizing effect. No aspiration hazard expected.
Chronic Toxicity/ Effects:	Prolonged or repeated exposure may cause pulmonary problems. Information on crystalline silica: The substance may cause increase in lung mass and lung tissue changes after repeated inhalation. This product may contain greater than 0.1% crystalline silica. Repeated exposure to high concentrations results in silicosis, a lung disease characterized by coughing, difficult breathing, wheezing, scarring of the lungs, and

repeated, non-specific chest illnesses. OSHA as classified this substance as harmful to the lung, kidney and immune system following repeated inhalation exposure

Mutagenicity tests revealed no genotoxic potential.

Carcinogenicity: Clay is not listed by MSHA, OSHA, or IARC as a carcinogen. However, this product contains crystalline silica; respirable crystalline silica has been classified by IARC and NTP as a known human carcinogen.

12. ECOLOGICAL INFORMATION

Ecotoxicity: This product has no known eco-toxicological effects. This product is not expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.

Persistence and Degradability: Inorganic product which cannot be eliminated from water by biological purification processes.

Bioaccumulation Potential: The product will not be readily bioavailable due to its consistency and insolubility in water.

Mobility in soil: Adsorption to solid soil phase is not expected.

Other adverse effects: None.

13. WASTE DISPOSAL CONSIDERATIONS

Disposal: This product is not hazardous waste. Dispose of in accordance with federal, state, and local regulations. Material should be recycled if possible.

14. TRANSPORT INFORMATION

Transportation: Not classified as a hazardous material under U.S. DOT or Canadian TDG regulations for land transport, IMDG regulations for sea transport, or IATA/ICAO regulations for air transport.

15. REGULATORY INFORMATION

US Federal Regulations: Chemical / Feed Registration Status: TSCA, US released / listed

EPCRA 311/312 (Hazard categories): Refer to SDS section 2 for GHS hazard classes applicable for this product.

Safe Drinking Water & Toxic Enforcement Act, CA Prop 65: **WARNING:** This product can expose you to chemicals including SILICA, CRYSTALLINE (AIRBORNE PARTICLES OF RESPIRABLE SIZE), which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

NFPA Hazard codes: Health: 1 Fire: 0 Reactivity: 0 Special:

HMIS III rating Health: 1 Flammability: 0 Physical hazard: 0

OSHA Highly Hazardous Process Safety Standard, 29 CFR 1910.1119: Not known to be hazardous

CERCLA Hazardous Substance List (40 CFR 302.4): Not listed

OSHA Specifically Regulated Substances, 29 CFR 1910.1001-1050: Not listed

Superfund Amendments and Reauthorization Act of 1986 (SARA): No hazard categories.

SARA 302 Extremely Hazardous Substance: No

SARA 311/312 Hazardous Chemical: No

SARA 313 (TRI reporting): Not regulated

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) List: Not regulated

Clean Air Act Section 112(r) Accidental Release Prevention, (40 CFR 68.130): Not regulated

Safe Drinking Water Act (SDWA): Not regulated

16. OTHER INFORMATION

Date of Revision: 04-14-2025

Reasonable care has been taken in preparation of this Safety Data Sheet. However, the data provided herein is without warranty, express or implied, regarding its correctness or accuracy. Individual users should determine the suitability of the information for their particular purpose and assume responsibility for loss, injury, damage, or expense resulting from improper use of this product.

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