Material Safety Data Sheet:	Mammoth Silica		
Version No. 3	Date of Preparation: October 2022	ANSI-Z400.1-2004 Format	
SECTION 1: PRODUCT AND COMPANY IDENTIFICATION			
Product Name:	Mammoth Silica		
Effective Date:	1 October 2022		
Distributor Information:	Growcentia, Inc.		
	4545 Viking Way		

GENERAL USE: *Mammoth Silica* has been shown to promote stem strength and upright stature.

SECTION 2: HAZARDS IDENTIFICATION

WARNING: Keep out of reach of children and animals. Causes skin and eye irritation.

Loveland, CO 80538 970-818-3321 (ph)

Eye Contact: Causes eye irritation. Avoid contact with eyes. If contact occurs, carefully rinse eyes with adequate water for at least 20 minutes and if wearing contact lenses, remove and continue rinsing. If irritation persists, seek medical attention.

Ingestion: May be harmful if swallowed. Do not ingest. If swallowed, rinse mouth and drink plenty of water. Call a poison center or medical professional if you feel unwell.

Skin Contact: Causes skin irritation. Avoid contact with skin. If contact occurs, remove contaminated clothing and wash contacted areas immediately with soap and water. If irritation persists, seek medical attention.

Inhalation: May cause respiratory irritation. May be harmful if inhaled. If irritation persists, seek medical attention.

Storage Precautions: Store in a well-ventilated place. Keep container tightly closed.

Medical Conditions: No medical conditions are known to be aggravated by exposure to *Mammoth Silica*. No hazardous ingredients, warnings due to low pH of product.

Hazard Classification: Skin irritant, Category 2. Eye irritant, Category 2A.

Hazard and Precautionary Statements: H315, H320, H335, H333, H303, P260, P264, P270, P271, P297, P280, P301, P312, P330, P320, P352, P305, P351, P338, P337, P313, P362, P364, P403, P233, P501.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients: Water, Silicon dioxide, Calcium acetate, Potassium nitrate, Sodium molybdate, Proprietary acidifier

CAS Number: 7732-18-5, 99439-28-8, 62-54-4, 7740-09-7, 7631-95-0

Synonyms: Mono Silicic Acid

SECTION 4: FIRST-AID MEASURES

Eye Contact: Reddening may develop. Immediately rinse the eye with large quantities of cool water until the material has been removed. Be sure to remove contact lenses, if present, and to lift upper and lower lids during rinsing. Seek medical attention if irritation persists.

Ingestion: If swallowed, rinse out mouth and drink water. Do not induce vomiting without medical advice. Seek medical attention if symptoms occur.

Skin Contact: Remove contaminated clothing. Wash clothing and contacted area thoroughly with plenty of soap and water. Seek medical attention if irritation persists.

Inhalation: Remove product and move to fresh air. Seek medical attention if irritation persists.

SECTION 5: FIRE-FIGHTING MEASURES

Mammoth Silica is stable, not flammable, and will not burn. No special procedures required.

Flash Point/Auto-Ignition: Not applicable.

Extinguishing Media: Not expected to burn.

Flammability Limits: Not flammable or combustible.

Special Fire Fighting Equipment/Procedures: Remove container from fire area.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures: Restrict access to area as appropriate until clean-up operations are complete. Stop or reduce any leaks if it is safe to do so. Do not touch spilled material. Ventilate spill area if possible. Use personal protective equipment recommended in Section 8 (Exposure Controls/Personal Protection).

Environmental Precautions: Do not let product enter drains or natural water sources.

Methods and Materials for Containment and Clean Up: SMALL SPILLS: Soak up spill with absorbent material. Place residues in a suitable, covered, properly labeled container. Wash affected area. LARGE SPILLS: Contain liquid using absorbent material, by digging trenches or diking. Reclaim into recovery or salvage drums or tank truck for proper disposal. Contact an approved waste hauler for disposal of contaminated recovered material. Dispose of material in compliance with regulations indicated in Section 13 (Disposal Considerations).

SECTION 7: HANDLING AND STORAGE

Handling: Use standard safe work procedures, including the use of protective clothing, gloves, eye, and respiratory protection. Avoid eye and skin contact. Do not take internally. Ensure all containers are labeled. Keep containers closed when not in use.

Storage: Always store in original packaging. Protect product from freezing. Store the containers tightly sealed. Stainless steel, fiber glass, Polyethylene compatibility with plastic materials may vary; it is recommended that compatibility is tested prior to use. DO NOT USE aluminum, mild steel, or brass.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls: General ventilation is recommended. Local exhaust ventilation may be necessary when dusts or mists are generated.

Personal Protection:

Eyes: Chemical goggles or shielded safety glasses recommended.

Skin: Protective clothing and rubber or neoprene gloves recommended.

Respiratory: Not normally required.

Other: Keep an eye wash fountain available. Keep a safety shower available. If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Semi-clear liquid Odor: No discernable smell Odor threshold: NA pH: 2.0-2.5 Melting/Freezing Point: Estimated at 0°C / 32°F Boiling Point: Estimated at 100°C / 212°F Flash point: NA Specific Gravity: 1.04 at 77°F / 25°C Flammability: Not flammable Upper/lower flammability/explosive limits: Not flammable Bulk Density: 8.7 lbs/gal Water Solubility: Soluble VOC Content: 0% calculated Viscosity: Not established Note: These physical properties are typical values for this product and are subject to change.

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability: This product is stable and non-reactive under normal conditions of storage, use, and transport.

Hazardous Reactions and Decomposition: Not applicable.

Hazardous Polymerization: Will not occur.

Incompatible Materials: Freezing temperatures.

SECTION 11: TOXOLOGICAL INFORMATION

Acute Oral LD ₅₀ (rat):	>34,000 mg/kg
Acute Dermal LD50 (rat):	>10,000 mg/kg
Eye Irritation (rabbit):	Not established
Skin Sensitization (guinea pig):	Not established
Skin Irritation (rabbit):	Not established

Carcinogenic Potential: None of the substances in this product are listed as carcinogens by the International Agency of Research on Cancer (IARC), the National Toxicology Program (NTP), or the American Conference of Governmental Industrial Hygienists (ACGIH).

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicology: No toxicity studies have been conducted on this product.

Mobility: The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level II model does not require equilibrium between the defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models. If released into the environment, this material is expected to distribute the air, water, and soil/sediment in the approximate respective percentages:

Air	Water	Soil/Sediment
<5%	30-50%	30-50%

The portion in water is expected to be soluble or dispersible.

Bioaccumulation: This preparation or material is not expected to bioaccumulate.

Environmental Hazard: Based on our hazard characterization, the potential environmental hazard is: Low.

Based on our recommended product application and the product's characteristics, the potential environmental exposure is: Low.

If released into the environment, see CERCLA/SUPERFUND in Section 15.

SECTION 13: DISPOSAL CONSIDERATIONS

If this product becomes a waste, it is not a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) 40 CFR 261 since it does not have the characteristics of Subpart C, nor is it listed under Subpart D.

As a non-hazardous waste, it is not subject to federal regulation. Consult state or local regulation for any additional handling, treatment, or disposal requirements. For disposal, contact a properly licensed waste treatment, storage, disposal, or recycling facility.

SECTION 14: TRANSPORT INFORMATION

The information in this section is for reference only and should not take the place of a shipping paper (bill of lading) specific to an order. Please note that the proper shipping name / hazard class may vary by packaging, properties, and mode of transport. Typical Proper Shipping Names for this product are as follows.

Land Transport:	Product is not regulated during transportation.
Air Transport (ICAO/IATA):	Product is not regulated during transportation.
Marine Transport:	Product is not regulated during transportation.

SECTION 15: REGULATORY INFORMATION

This section contains additional information that may have relevance to regulatory compliance. The information in this section is for reference only. It is not exhaustive and should not be relied upon to take the place of an individualized compliance or hazard assessment.

National Regulations, USA:

OSHA Hazard Communication Rule, 29 CFR 1910.1200:

Based on our hazard evaluation, none of the substances in this product are hazardous.

CERCLA/SUPERFUND, 40 CFR 117, 302:

Notifications of spills of this product are not required.

SARA/SUPERFUND Amendments and Reauthorization Act of 1986:

SECTION 302 – This product does not contain substances listed in Appendix A and B as an Extremely Hazardous Substance

SECTIONS 311 and 312 – Our hazard evaluation has found that this product is not hazardous under 29 CFR 1910.1200.

- Immediate (Acute) Health Hazard
- Delayed (Chronic) Health Hazard
- Fire Hazard
- Sudden Release of Pressure Hazard
- Reactive Hazard

Under SARA 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are: 500 pounds or the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

SECTION 313 – This product does not contain substances on the List of Toxic Chemicals.

Toxic Substances Control Act (TSCA):

The substances in this preparation are included on or exempted from the TSCA 8(b) Inventory (40 CFR 710)

Federal Water Pollution Control Act, Clean Water Act, 40 CFR 401.5:

Substances listed under this regulation are not intentionally added or expected to be present in this product. Listed components may be present at trace levels.

Clean Air Act, Sec. 112 and Sec. 602:

Substances listed under this regulation are not intentionally added or expected to be present in this product. Listed components may be present at trace levels.

California Proposition 65:

Substances listed under California Proposition 65 are not intentionally added or expected to be present in this product.

Michigan Critical Materials:

Substances listed under this regulation are not intentionally added or expected to be present in this product. Listed components may be present at trace levels.

National Regulations, Canada:

Workplace Hazardous Materials Information System (WHMIS):

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by CPR.

WHMIS Classification:

Not considered a WHMIS controlled product.

SECTION 16: OTHER INFORMATION

Based on our recommended use of this product, we have characterized the product's general risk. This information should aid with your own risk management practices. We have evaluated our product's human and environmental risk as low.

Any use inconsistent with our recommendations may affect the risk characterization. Our sales representatives will assist you to determine if your product application is consistent with our recommendations. Together we can implement an appropriate risk management process.

This product safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to insure safe workplace operations. Please consult your local sales representative for any further information.

The information is furnished without warranty on 1 October 2022, representation, inducement, or license of any kind, except that it is accurate to the best of Growcentia'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 Growcentia has no control over how this information may be ultimately used, all liability is expressly disclaimed and Growcentia assumes no liability.