

Safety Data Sheet

SECTION 1 – Chemical Product and Company Identification

Trade Name(s): Crystal Flo Filter Aid, Krum Horticultural Perlite, Carolina Perlite Aggregate

CAS #: 93763-70-3

Chemical Name: Sodium Potassium Aluminum Silicate

Formula: Mixture

Product Use: Insulation, Construction, Industrial, and Horticultural Applications

SECTION 2 – Hazards Identification

Signal word: None required. The respirable crystalline silica content falls below the 0.1% threshold needed for a signal word.

GHS Hazard Pictogram: None. This material has been evaluated and does not require a pictogram. GHS

Hazard Statement: None. This material has been evaluated and does not present any GHS hazards.

Hazards Not Otherwise Classified: Mechanical irritation only.

Supplemental information based on route of entry:

Skin contact: Repeated or prolonged contact may cause skin dryness as skin oils are absorbed.

Skin absorption: N/A

Eye contact: May irritate or injure eyes, mechanically.

Inhalation: Upper respiratory irritant: May aggravate pre-existing respiratory conditions. Long-term inhalation of respirable crystalline silica can cause disabling lung disease (silicosis).

Ingestion: LD50 not established, presumed over 10,000 mg/kg.

Sensitization: Non-sensitizing.

Emergency Overview: Coarse and fine particle size products represent inhalation hazards that can readily be controlled with appropriate dust protection equipment and techniques. Avoid processes that generate unnecessary dust.

Potential Health Effects: See above regarding long term exposure: skin irritation, silicosis and eye irritation.

SECTION 3 – Composition/Information on Ingredients

Product Description/Components: Expanded perlite powder or granules, CAS# 93763-70-3

Hazardous Ingredients	CAS#	%	ACGIH TLV, mg/cu.m.	NIOSH mg/cu.m	OSHA PEL, mg/cu.m
Respirable Quartz	14808-60-7	<0.1 (Not detected)	0.025	0.05	0.1
Quartz: Oral, rat LD ₅₀ : > 20,000 mg/kg			LC ₅₀ : Not Available		

SECTION 4 – First Aid Measures

Skin Contact: Wash off with soap and water. Skin lotion will quickly replace oils lost due to drying effect of perlite.

Eye Contact: Flush eyes with plenty of water. Remove contact lenses if easy to do so. Continue rinsing.

Inhalation: Remove to fresh air. Get medical attention if victim is uncomfortable or not breathing.

Ingestion: Do not induce vomiting. Rinse mouth.

SECTION 5 – Fire Fighting Measures

Flammable: No

Means of Extinction: Use extinguishing media appropriate for surrounding material that is on fire or could be set on fire.

Explosion Data - Sensitivity to Impact: None

Explosion Data - Sensitivity to Static Discharge: None; silicates are considered non-combustible dust

Hazardous Combustion Products: N/A

NFPA: Health: 0, Flammability: 0, Reactivity: 0, Other: None

HMIS Ratings: Health: *(See SDS), Flammability: 0, Reactivity: 0, Personal Protection: E

SECTION 6 – Accidental Release Measures

Leak and Spill Procedures: Normal clean-up procedures. Care should be taken to avoid causing dust to become airborne. Vacuum cleaning systems are recommended. Wetting spilled material with water may control dust and make clean up easier.

SECTION 7 - Handling and Storage

Handling Procedures and Equipment: Avoid creating unnecessary dust.

Storage Requirements: Store with other dusty materials, away from products that could be affected by dust.

SECTION 8 - Exposure Control/Personal Protection

Exposure Limits

ACGIH TLV: 10 mg/m³ total dust / 3 mg/m³ respirable dust

OSHA PEL: 15 mg/m³ total dust / 5 mg/m³ respirable dust

Engineering Controls:

- General: Good housekeeping rules apply.
- Local exhaust from workstations using this material.
- Water spray to minimize dusting if appropriate.

Recommended Personal Protective Equipment:

- Plastic or Rubber Gloves if skin dryness occurs
- Respirator – NIOSH/OSHA/MSHA approved dust respirator adequate for contaminant concentrations encountered.
- Eye protection recommended
- Disposable footwear for frequent handling of this material
- Coveralls for frequent handling of this material

SECTION 9 – Physical and Chemical Properties

Physical State: Solid powder or granules

Odor and Appearance: White to off white powder or granules with no odor

Odor Threshold (ppm): N/A

Specific Gravity: 2.35

Vapor Density (air=1): N/A

Vapor Pressure (mmHg): N/A

Flash Point (°C) and method (open cup or closed cup): N/A

Upper Flammable Limit (% by volume): N/A

Lower Flammable Limit (% by volume): N/A

Autoignition Temperature (°C): N/A

Evaporation Rate: N/A

Boiling Point (°C): N/A

Freezing Point (°C): N/A

pH: 6.5 – 7.5, as 10% slurry in distilled water

Coefficient of Water/Oil Distribution: N/A

Solubility in Water: Negligible

Visual Detection Method Only

SECTION 10 – Stability and Reactivity

Chemically Stable?: Yes. Hazardous polymerization will not occur.

Incompatibility with other substances? Yes: Hydrofluoric acid (HF)

Reactivity, and under what conditions?: Toxic silicon tetrafluoride (SiF₄) gas will result with contact with hydrofluoric acid.

Hazardous Decomposition Products: See above

SECTION 11 – Toxicological Information

Effects of Acute Exposure: Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), or in case of inhalation (irritant).

Effects of Chronic Exposure:

Irritancy of Product: Potential for creating skin dryness.

Respiratory Irritation: Upper Respiratory Irritant: May aggravate pre-existing respiratory conditions.

Long-term inhalation of respirable crystalline silica can cause disabling lung disease (silicosis).

For a comprehensive review, see: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4002636/>

Carcinogenicity: These products contain less than 1% crystalline silica, of which very low percentages (0.1 – 5.0%) are particles of respirable size. These products hence contain far lower than 0.1% respirable crystalline silica and present very low risk.

IARC: Not reviewed

ACGIH: PNOS/C/R (Particulates Not Otherwise Specified/Classified/Regulated), Not carcinogenic

Reproductive Toxicity: Not available

Teratogenicity: Not established

Embryotoxicity: Not available

Mutagenicity: Ames: Not available

SECTION 12 – Ecological Information

Aquatic Toxicity: Low hazard for usual industrial or commercial handling. Approved for use in soils.

SECTION 13 – Disposal Considerations

Waste Disposal: Dispose of this product in accordance with all applicable local, state and Federal regulations. If contaminated by other substances, the manner of disposal would be governed by those substances.

SECTION 14 – Transport Information

Special Shipping Information

DOT: No special requirements

IMO: Non-hazardous

ICAO: Non-hazardous

SECTION 15 – Regulatory Information

OSHA: Label as required by Hazard Communication Standard 29 CFR 1910.1200 (f) and applicable state and local laws and regulations

TSCA: Included as a naturally occurring material

EUROPE: Exempt from REACH as a naturally occurring mineral, not chemically modified. Status confirmed in Annex V Guidance Document Version 1.1, November 2012

California Proposition 65: WARNING: This product contains chemicals (respirable crystalline silica) known to the State of California to cause cancer.

SECTION 16 – Other Information

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

Information provided in this document is believed to be accurate as of October 1, 2021 and may be subject to change without notice. The information is provided in good faith to comply with applicable federal and state laws. However, no warranty or representation with respect to such information is intended or given. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations.