SAFETY DATA SHEET

SECTION 1 - Chemical Product and Company Identification
Trade Name(s): UNISOAK

CAS #: 93763-70-3
Chemical Name:Sodium Potassium Aluminum Silicate
Formula: Mixture
Product Use: Insulation, Construction, Industrial, and Horticultural Applications

Manufacturer: Spill Defence Manufacturing Ltd
Address: Unit 7A-7E Waddington Way, Aldwarke, Rotherham, S65 3SH
Telephone:01709 917 699
Emergency:01709 917 699

Supplier's Name (if different)
N/A

Preparation date of SDS: 15/3/23
SDS Prepared By: Richard Smith

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: LD_{50} 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/m^3 total dust
3 mg/m^3 respirable dust
OSHA PEL: 15 mg/m^3 total dust
5 mg/m^3 respirable dust

Engineering Controls

- General: Good housekeeping rules apply
- Local exhaust from work stations 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$_4$ (SiF) gas will result with con 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).

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 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 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
WARNING: This product contains chemicals (respirable crystalline silica) known 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 March 15, 2023 and may be subject to change without notice. The information is provided in good faith to comply with applicable 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 laws and regulations.