SECTION 1 - Chemical Product and Company Identification  
Product Identifier: Perlite, Expanded, ENSORB Super Absorbent  
Product Class: Amorphous Sodium Potassium Aluminum Silicate  
Product Use: Industrial  

ENPAC, LLC  
34355 Vokes Drive  
Eastlake, OH 44095  
Phone (888) 473-3660  

Preparation date of SDS: September 22, 2014  

SECTION 2 – Hazards Identification  
Route of entry:  
Skin contact: Repeated or prolonged contact may cause irritation  
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 2000 mg/kg  
Emergency Overview: The fine particle size products represent inhalation hazards that can readily be controlled with appropriate dust protection equipment. Avoid processes that generate unnecessary dust.  

WHMIS Symbols:  
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  

<table>
<thead>
<tr>
<th>Hazardous Ingredients</th>
<th>CAS#</th>
<th>%</th>
<th>TLV, mg/cu.m</th>
<th>NIOSH, mg/cu.m</th>
<th>OSHA PEL, mg/cu.m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quartz</td>
<td>14808-60-7</td>
<td>&lt;0.1</td>
<td>0.025 (Respirable)</td>
<td>0.05 (Respirable)</td>
<td>0.1 (Respirable)</td>
</tr>
</tbody>
</table>

LD$_{50}$: Not Available  
LC$_{50}$: Not Available  

SECTION 4 – First Aid Measures  
Skin Contact: Wash off with soap and water  
Eye Contact: Flush eyes with generous amounts of water for at least 5 minutes. Inhalation: Remove to fresh air. Seek medical attention if victim is not breathing or uncomfortable.  
Ingestion: Do not induce vomiting. Seek medical attention if victim is not breathing or uncomfortable.  

SECTION 5 - Fire Fighting Measures
Flammable: No  
Means of Extinction: Use extinguishing media appropriate for surrounding material.  
Flashpoint (°C) and Method (oc or cc): N/A  
Upper Flammable Limit (% by volume): N/A  
Lower Flammable Limit (% by volume): N/A  
Autoignition Temperature (°C): N/A  
Explosion Data - Sensitivity to Impact: N/A  
Explosion Data - Sensitivity to Static Discharge: High airborne concentrations of dusts are susceptible to explosions.  
Hazardous Combustion Products: N/A  
NFPA: Health: *(Refer to MSDS), Flammability: 0, Reactivity: 0, Other: None  
HMIS Ratings: Health: *(See MSDS), 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 COMMENTS
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 work stations using this material  
Recommended Personal Protective Equipment:  
 Plastic or Rubber Gloves if skin irritation occurs  
 Respirator – NIOSH/OSHA 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  
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
Incompatibility with other substances?
Yes: Hydrofluoric acid (HF)
Reactivity, and under what conditions?: Toxic silicon tetrafluoride 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 IRRITANT for Skin Sensitization,
Respiratory Sensitization: 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 0.1% crystalline silica, and low percentages of particles of respirable size, hence present very low risk.
IARC: Not reviewed
ACGIH: PNOS (Particulates Not Otherwise Specified), 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.

SECTION 14 – Transport Information
Special Shipping Information
DOT: No special requirements
IMO: Non-hazardous
ICAO: Non-hazardous
SECTION 15 – Regulatory Information
WHMIS CLASSIFICATION: D2B (Toxic)
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
CANADA DSL: Included or exempt

SECTION 16 – Other Information
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by CPR.

Information provided in this document is believed to be accurate as of September 22, 2014 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.