# **Hydro Generation**



# SAFETY DATA SHEET

Revision Date: 10/11/2018

#### 1. IDENTIFICATION Product Identifiere

oduct identifiers	
Product Name:	Socorro Sourced Expanded and Milled Perlite
Product Numbers:	VPER1, VPERCH1, VPER4, VPERCH4,

Trade Name:	
General Use:	Multi-Functional Industrial/Commercial Mineral
Chemical Family:	Amorphous Volcanic Glass

#### **Relevant Identified Uses**

Identified Uses: Commonly used in Insulation, Construction, Horticulture, Filtration and Other Industrial/Commercial Applications

#### **Supplier Details**

Company:

Hydro Generation LLC Southmeadow PKWY W, Ste C Atlanta Georgia, United States, 30349

#### **Emergency Telephone Number**

Emergency Phone#: +1 404-349-6955

#### 2. HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

Component Classified - None

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) - Not Classified

#### GHS Label elements, including precautionary statements

Pictogram	Not applicable
Signal word	No signal word
Hazard statement(s)	Not applicable
Precautionary statement(s)	Not applicable

#### Hazards not otherwise classified (HNOC) or not covered by GHS - none

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS Substance/Mixture: Mixture

Other Means of Identification: Expanded and/or Milled Perlite

#### Ingredients

Chemical Name, Empirical Formula	CAS Number	EINECS Number	Percentage (%)
Expanded and/or Milled Perlite Ore	93763-70-3	310-127-6	100% WT

#### **Hazardous Components**

These products may contain naturally occurring trace level minerals at concentration levels below HazCom 2012 and GHS Revision 3 hazard classification limits. Per XRC(M) analysis, which combines the analytical capabilities of Inductively Coupled Plasma Optical Emissions Spectrometry, X-Ray Diffraction, Computer Controlled Scanning

Electron Microscopy/Energy Dispersive Spectroscopy and Raman Spectroscopy to conduct particle-by-particle physicochemical/mineralogical analysis - naturally occurring trace level substances in these products are inextricably bound, environmentally unavailable and at de minimis concentrations. Thus, in accordance with the stated application, they are believed to be incapable of causing harm under normal conditions of use or in an extreme upset environment.

#### Additional Information

Per the XRD Rietveld Method, used to determine mixture components and content, there are no additional ingredients present at significant levels within these products and based on the best available information, any trace level impurities that might exist are not concentration levels triggering classification and hence, are not reportable within this section. Therefore, any and all trace level components have been excluded from reporting and classification as either a health or environmental hazard.

#### 4. FIRST AID MEASURES

#### **Description of Necessary First Aid Measures**

Eye Contact: In case of eye contact, flush eyes with water. If necessary, seek medical attention.

**Inhalation:** If adverse effects occur, remove to uncontaminated area. If not breathing, give artificial respiration or oxygen by qualified personnel. Seek immediate medical attention.

**Skin Contact:** Use good hygiene practices including washing of skin with soap and water. If irritation occurs, seek medical attention.

No known significant effects or critical hazards

Ingestion: Not an anticipated route of exposure. If a large amount is swallowed, get medical attention.

#### Most Important Symptoms/Effects, Acute and Delayed

#### **Potential Acute Health Effects**

Eye Contact	May cause slight irritation
Inhalation	May cause slight irritation
Skin Contact	May cause slight irritation
Ingestion	No known significant effects or critical hazards
Over-Exposure Signs/Symptoms	
Eye Contact	No known significant effects or critical hazards
Inhalation	No known significant effects or critical hazards
Skin Contact	No known significant effects or critical hazards

# Indication of any Immediate Medical Attention and Special Treatment Needed

Treat symptomatically. Seek medical care if large quantities have been ingested or inhaled.

### **5. FIREFIGHTING MEASURES**

#### Suitable Extinguishing Media

Ingestion

Use an extinguishing agent suitable for the surrounding fire.

# Unsuitable Extinguishing Media

None Known

### Special Hazards Arising from the Chemical

No specific fire or explosion hazard

#### **Hazardous Thermal Decomposition Products**

None Known

#### **Special Protective Actions for Firefighters**

No special measures are required

#### **Special Protective Equipment for Firefighters**

Fire-fighters should wear protective equipment appropriate to the fire hazard which exists.

#### 6. ACCIDENTAL RELEASE MEASURES

#### Personal Precautions, Protective Equipment and Emergency Procedures

#### **For Non-Emergency Personnel**

Products are naturally occurring earthen materials. No special precautions are known.

#### For Emergency Responders

Products are naturally occurring earthen materials. No special precautions are known.

#### **Environmental Precautions**

Products are naturally occurring earthen materials. No special precautions are known.

#### Methods and Material for Containment and Cleaning Up

Handle wastes in accordance with local requirements.

#### 7. HANDLING AND STORAGE

#### **Precautions for Safe Handling**

Wear personal protective equipment in accordance with those recommendations provided in Section 8. Use good hygiene practices and wash hands and face before eating, drinking or conducting personal hygiene. Reduce contamination from clothing and protective equipment before entering eating areas.

#### Conditions for Safe Storage, Including any Incompatibilities

Store in accordance with local regulations.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits (General Dusts):		
OSHA (PEL):	15 mg/m3 (TWA, total particulates, not otherwise regulated)	
	5 mg.m3 (TWA, respirable particulates, not otherwise regulated)	
ACGIH (TLV):	10 mg/m3 (TWA, inhalable particulates, not otherwise regulated)	
	3 mg/m3 (TWA, respirable particulates, not otherwise regulated)	

#### **Engineering Controls:**

Observe occupational exposure limits and provide local ventilation as necessary to control dust inhalation.

#### **Personal Protection:**

**Hygiene Measures:** No specific recommendation made, but good hygiene practices are advised. Wash hands, forearms and face after handling products and prior to eating, smoking, and using the lavatory.

Eye/Face Protection: Wear eye protection where excessive eye contact may occur. Provide eyewash station.

**Skin and Body Protection:** Follow good Industrial Hygiene practices. Wash hands at the end of each work shift and before eating, smoking, and personal hygiene.

**Respiratory Protection:** No specific recommendations made, but respiratory protection must be used where general dust levels exceed occupational exposure limits. If desired, appropriate respiratory protection may be utilized in high dust conditions and affected work areas.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

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Physical state:	Granular Solid
Color:	Grey to Off-White
Upper/lower flammability/explosive limits:	Not Applicable
Odor:	Odorless
Odor threshold:	Not Applicable
Vapor pressure:	Not Applicable
Vapor density:	Not Applicable
VOC Content:	None, as produced
Viscosity:	Not Applicable
pH:	5-10 (Neutral-10% Solution in Water)
Specific Gravity:	2.2-2.4 (water=1)
Melting/Freezing point:	>1037C/1900F (@760 mm Hg) / Not Applicable
Solubility(ies)	Negligible, but miscible
Initial boiling point and boiling range:	Not Applicable
Partition coefficient: n-octanol/water:	Not Applicable
Flash point:	Not Applicable
Auto-ignition temperature:	Not Applicable
Evaporation rate	Not Available
Decomposition temperature:	Not Available
Flammability (solid, gas):	Not Flammable (Inorganic Solid)

#### **10. STABILITY AND REACTIVITY**

Reactivity

Stable under normal temperature conditions.

#### **Chemical Stability**

Stable under normal storage and handling conditions.

**Possibility of Hazardous Reactions** None known under normal conditions of storage and use.

Conditions to Avoid (e.g., static discharge, shock, or vibration)

Avoid contact with hydrofluoric acid.

Incompatible Materials Hydrofluoric Acid

#### Hazardous Decomposition Products

Hazardous decomposition products should not be produced under normal conditions of storage and use. In the presence of hydrofluoric acid, hazardous gases may form.

#### 11. TOXICOLOGICAL INFORMATION

#### Information on Toxicological Effects

These substances have shown no evidence of adverse health effects under normal conditions of use or in extreme upset environments.

Acute Toxicity: This product is not classified.

Irritation/Corrosion: This product is not classified.

Sensitization: This product is not classified.

Mutagenicity: This product is not classified.

Carcinogenicity: This product is not classified.

**Reproductive Toxicity:** This product is not classified.

Teratogenicity: This product is not classified.

Specific Target Organ Toxicity (Single Exposure): This product is not classified

Specific Target Organ Toxicity (Repeated Exposure): This product is not classified

Aspiration Hazard: This product is not classified.

Information on the Likely Routes of Exposure (Dermal Contact, Eye Contact, Inhalation, Ingestion)

#### **Potential Acute Health Effects**

Eye Contact: No known significant health effects or critical hazards.

Inhalation: No known significant health effects or critical hazards.

Skin Contact: No known significant health effects or critical hazards.

Ingestion: No known significant health effects or critical hazards.

#### Symptoms Related to the Physical, Chemical and Toxicological Characteristics

Eye Contact: Particles in the eyes may cause irritation

Inhalation: Dust in high concentrations may irritate the respiratory system

Skin Contact: Powder may irritate skin

Ingestion: May cause discomfort if swallowed

# Delayed and Immediate Effects and Also Chronic Effects from Short and Long Term Exposure Short Term Exposure

**Potential Immediate Effects:** No known significant health effects or critical hazards. **Potential Delayed Effects:** No known significant health effects or critical hazards.

#### Long Term Exposure

Potential Immediate Effects: No known significant effects or critical hazards.

Potential Delayed Effects: No known significant effects or critical hazards.

#### **Potential Chronic Health Effects**

General: No known significant effects or critical hazards.

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental Effects: No known significant effects or critical hazards.

Fertility Effects: No known significant effects or critical hazards.

#### **Numerical Measures of Toxicity**

#### Acute Toxicity Estimates:

Acute toxicity (Oral LD50): Not relevant Acute toxicity (Dermal LD50): Not relevant Acute toxicity (Inhalation LC50): Not relevant

Toxicity: No data available for this product.

Persistence and Degradability: No data available for this product.

Bioaccumulative Potential: No data available for this product.

Mobility in Soil (Soil/Water Partition Coefficient): No data available for this product.

#### Other Adverse Effects: None known

#### **12. ECOLOGICAL INFORMATION**

Ecotoxicity

Not regarded as dangerous for the environment.

#### **Acute Fish Toxicity**

Not considered toxic to fish.

#### Persistence and Degradability

These products are not readily biodegradable.

#### **Bioaccumulative Potential**

These products are not bioaccumulating.

#### Mobility in Soil

Not relevant, due to the form of the products.

#### **Other Adverse Effects**

None. Expanded and/or Milled Perlite products represent a heat processed inorganic, inert material that does not constitute any known health hazards and is non-combustible.

# 13. DISPOSAL CONSIDERATIONS

#### Waste Treatment Methods

Dispose of waste and residues in accordance with local and national environmental requirements.

#### **14. TRANSPORT INFORMATION**

	DOT Classification	IMDG	IATA
UN Number	Not Regulated	Not Regulated	Not Regulated
UN Proper Shipping Name			
Transport Hazard Class(es)			

Packing Group			
Environmental Hazards	No	No	No

AERG: Not applicable

#### Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

#### Special Precautions for User: Not applicable

Additional Information: Non-bulk packages of this product are not regulated as hazardous materials unless transported by inland waterway. This product is not regulated as a hazardous material when transported in sizes of  $\leq$ 5 L or  $\leq$ 5 kg, provided the packaging meets general provisions of DOT §§ 173.24 and 173.24a; IMDG 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.; and IATA 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

#### 15. REGULATORY INFORMATION US Federal Regulations

#### TSCA 8(a) PAIR Not determined

#### TSCA 8(a) CDR Exempt/Partial exemption Not determined

#### United States Inventory (TSCA 8b) All components are listed or exempted

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAP's) Not listed

Clean Air Act Section 602 Class I Substances Not listed

Clean Air Act Section 602 Class II Substances Not listed

DEA List I Chemicals (Precursor Chemicals) Not Listed

DEA List II Chemicals (Essential Chemicals) Not Listed

SARA 302/304 - Composition/Information on Ingredients No products were found

SARA 313/304 RQ Not Applicable

SARA 311/312 - Classification Not applicable

#### SARA 313

Not applicable. This product does not contain chemicals subject to SARA Title III Section 313 Reporting requirements.

#### State Regulations

#### **California Proposition 65 Components**

These products do not contain chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm at levels above the "safe harbor" designation.

#### Other State Right to Know Components

No investigation of State and Local requirements was performed. For details on these regulatory requirements, contact the appropriate agencies within your region.

#### **16. OTHER INFORMATION**

# Procedures Used to Drive Classification

Classification	Justification
Not Classified	Toxicology Library and Available Databases

## **Further Information**

License granted to make unlimited paper copies for internal use only. The above information is believed to be correct as of the date of preparation and does not purport to be all inclusive or account for naturally occurring variation in the composition of raw ores. It therefore, represents no guarantee of the properties associated with these products.

The information in this document should be used only as a guide in applying the appropriate safety precautions and professional consultation is advised. Should naturally occurring variation cause significant change in product composition, this information will undergo revision as appropriate. Hydro Generation LLC. and its affiliates shall not be held liable for any damage resulting from the end user's handling or contact with these products.

# **Document History**

Version: 3.1

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