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## SAFETY DATA SHEET

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product Identifier:

## Expanded Perlite

CAS No. 93763-70-3

#### 1.2 Relevant uses of the substance or mixture and uses advised against:

Animal Feeds  
Back Fill For Firebacks.  
Chimney Lining.  
Cryogenic Insulation  
Filtration  
Fireplace Manufacture  
High & Low Temperature Insulation.  
Horticulture.  
Lightweight Concretes and Screeds.  
Fireproofing  
Liquid Wastes Adsorbent: - Oils, Acids, Alkalis, Nuclear Residues & Toxic Chemicals  
Loose Fill Insulation.  
Pipe And Duct Insulation.  
Plasters And Mortars  
Refractory Applications.  
Carrier for Fertilisers

#### 1.3 Details of the supplier of the safety data sheet:

Westland Horticulture Ltd  
Alconbury  
Huntingdon  
PE28 4HY

Sinclair Pro is a subsidiary of Westland Horticulture

**Contact: The Safety Officer**  
**Phone number: +44 (0)1480 443789**  
**Website: <http://www.gardenhealth.com/about-westland/contact>**

#### 1.4 Emergency phone number

**Phone number:** 01480 443789

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### 2. Hazards Identification

#### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008 (EU-GHS/CLP)**  
This mixture is not classified as dangerous to humans or the environment

#### **Classification according to 67/548/EEC (EU-DSD)**

This mixture is not classified as dangerous to humans or the environment

#### **Primary Hazard**

None

#### 2.2 Label Elements

There are no statutory labelling requirements under Directive 1999/45/EC, regulation 1272/2008 and regulation 453/2012.

#### 2.3 Other Hazards

Mixture not classed as PBT or vPvB

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

## Expanded Perlite

Amorphous mineral rock comprising of sodium potassium aluminium silicates of variable composition – chemically inert. A heat processed inorganic, inert material that does not constitute any known health hazard and is non-combustible.

### 3.2 Mixtures

There are no ingredients present within the current knowledge of the supplier at applicable concentrations that are classified as hazardous to health or the environment.

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## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

#### 4.1.1 Inhalation

If symptoms arise remove from source of exposure to fresh air; seek medical attention if symptoms persist or develop

#### 4.1.2 Skin & Eye exposure

Skin: Drench immediately with water. Remove any contaminated clothing and launder before re-use. Obtain medical attention if symptoms develop or persist.

Eyes: Immediately rinse with clean water for 15 minutes. Obtain medical attention if symptoms develop or persist.

#### 4.1.3 Ingestion

Do not induce vomiting. Wash out mouth with water and give water to drink. Obtain medical attention if symptoms develop or persist.

### 4.2 Most important symptoms and effects, both acute and delayed

Non-toxic. No evidence of causing pneumoconiosis or silicosis. Can cause irritation of throat if contact is prolonged. In some operations, may cause skin dryness or abrasion.

### 4.3 Indication of any immediate medical attention and special treatment needed.

Information not available

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## 5. FIRE-FIGHTING MEASURES

### 5.1 Extinguishing media

Expanded Perlite is a non-combustible material, use an extinguishing agent suitable for the surrounding fire

### 5.2 Special Hazards arising from the substance or mixture

Perlite is classified for reaction to fire as Class A1 in Decision 96/603/EC as amended by Decision 2000/605/EN. Will not give off noxious fumes. Fusion point 1280-1350Deg C. However, when used as an absorbent with flammable liquids, Perlite will not render the fluids non-flammable and therefore saturated absorbent Perlite containing flammable spillage should be removed and disposed of promptly.

### 5.3 Advice for fire-fighters

Isolate the scene by removing all persons from the fire location. Fire fighters should wear appropriate self-contained breathing apparatus (SCBA) with a full face piece operated in a positive pressure mode. Clothing for firefighters conforming to EN 469 should be worn

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## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

The following precautions are considered to be good practice when using any chemicals irrespective of their classification unless otherwise specified.

Ensure adequate ventilation

Use personal protective equipment,

- Gloves
- Eye protection
- Suitable respirator if dust is generated during handling

### 6.2 Environmental Precautions

Do not allow to enter storm drains or water courses. If this product enters a water course or a sewer (including via contaminated soil & vegetation) in large quantities contact local water authority and inform the Environment Agency

### 6.3 Methods and material for containment and cleaning up

Sweep spilled substances into covered containers for disposal or re-use: if appropriate moisten first to prevent dusting (extra personal protection P I filter respirator for inert particles). Dispose of by a licenced waste disposal contractor.

### 6.4 Reference to other sections

See also section 8

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## 7. HANDLING AND STORAGE

### 7.1 Precaution for safe handling

## Expanded Perlite

Use suitable handling procedures to minimise dust nuisance. If dust level is excessive, wear goggles and dust masks (to BS4275). Depending on application, can be dampened in bag before use to minimise dust. Waste material should be suitably contained for disposal to avoid wind-borne nuisance dust.

Wash Hands thoroughly after handling. Avoid breathing dust  
Do not eat, drink or smoke when using this product

### 7.2 Conditions for safe storage, including any incompatibilities

Store in a cool dry atmosphere, in original labelled containers. Refer to manufacturer for maximum safe stacking height. Keep away from heat sources, combustible materials and strong oxidising agents.

### 7.3 Specific end use(s)

No Information available

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control Parameters

Occupational Exposure Limit - LTEL: 10 mg/M3 (Inh), 1 mg/M3 (Resp). 8 hr TWA. (Inh = Inhalable Dust. Resp = Respirable dust)

Biological Exposure Limited: - Not applicable.

### 8.2 Exposure controls

The following precautions are considered to be good practice when using any chemicals irrespective of their classification unless otherwise specified.

Primary Hazard is considered to be dust. Use in a well-ventilated area and wear a dust mask if visible dust is being generated.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

#### Typical Chemical Analysis:

**SILICA (as SiO<sub>2</sub>)** 71 – 75 %  
**ALUMINUM (as Al<sub>2</sub>O<sub>3</sub>)** 12 – 18 %  
**POTASSIUM (as K<sub>2</sub>O)** 2 – 5 %  
**SODIUM (as Na<sub>2</sub>O)** 2 - 5 %  
**CALCIUM (as CaO)** 0.5 – 2 %  
**IRON (as Fe<sub>2</sub>O<sub>3</sub>)** 0.2 – 1.5 %  
**MAGNESIUM (as MgO)** 0.03 – 0.5%  
**SULPHUR (as S<sub>03</sub>)** 0 – 0.2%  
**FERROUS (as Fe<sub>0</sub>)** 0 – 0.1%  
**CHROMIUM (as Cr<sub>2</sub>O<sub>3</sub>)** 0 – 0.1%  
**BARIUM (as Ba<sub>0</sub>)** 0 – 0.05%  
**TOTAL CHLORIDES** trace – 0.2 %  
**TOTAL SULPHATES** NIL  
**ORGANIC MATTER** NIL

#### Physical properties:

**COLOUR** White (when expanded)  
**REFRACTIVE INDEX** 1.5  
**FREE MOISTURE (MAX)** 0.5%  
**pH OF WATER SLURRY** 6.7 – 7.5  
**BULK DENSITY (raw ore graded)** 1000 – 1500kg/m<sup>3</sup>  
**BULK DENSITY (loose weight) Expanded** 35 – 120kg/m<sup>3</sup>  
**PARTICLE SIZES AVAILABLE EXPANDED** 75MICRON – 6MM  
**SOFTENING POINT** 890 – 1100 C  
**FUSION POINT** 1280 – 1350 C  
**FIRE RESISTANCE** NON COMBUSTIBLE  
**SPECIFIC HEAT** 0.2 CAL/G C (837J/KGK)  
**THERMAL CONDUCTIVITY (AVE)** 0.05W/M C  
**SPECIFIC GRAVITY** 2.2 – 2.4  
**LOSS OF IGNITION** 1.5 – 3.0 %  
**REFRACTIVE INDEX** 1.47

### 9.2 Other Information

No other relevant information available

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## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No specific information available

### 10.2 Chemical Stability

Stable under normal conditions

### 10.3 Possibility of hazardous reactions

No specific hazardous reactions known.

## Expanded Perlite

### 10.4 Conditions to avoid

\*Material to avoid is quoted as being acids. It has been shown that prolonged contact with acids particularly at elevated temperatures does affect expanded Perlite, also direct contact with Ammonium Bifluoride and Hydrofluoric acids must be avoided, so this statement is technically correct. However for many years Perlite has been used without problem as an absorbent carrier for sucking up a wide range of dilute acids and other hazardous chemicals.

### 10.5 Incompatible materials

Acids\* (see 10.4)

### 10.6 Hazardous decomposition products

Under normal conditions of storage and use hazardous decomposition products should not be produced.

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## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

The mixture has not been assessed for toxicological effects, the mixture classification is given in section 2 based on individual component contents. Individual component hazards if any are given in section 3

Chronic Effects: None Known.

No toxic effect known including sensitisation, narcosis or carcinogenicity.

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## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Mixture not classified as harmful to aquatic life.

### 12.2 Persistence and degradability

No specific information available

### 12.3 Bioaccumulative potential

No specific information available

### 12.4 Mobility in soil

No specific information available

### 12.5 Results of PBT and vPvB

Not classified

### 12.6 Other adverse effects

No specific information available

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## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste Treatment Methods

Disposal method in accordance with all applicable national environment laws and regulations.

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## 14. TRANSPORT INFORMATION

**14.1 UN number:** Product is unclassified for transport

**14.2 UN proper shipping name:** Product is unclassified for transport

**14.3 Transport hazard** Product is unclassified for transport

**14.4 Packing group:** Product is unclassified for transport

**14.5 Environmental hazards:** Product is unclassified for transport

**14.6 Special precautions for user:** No information available

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code**

Applicable for Maritime bulk transport only. Check with carrier.

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## 15. REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.

This substance is classified and labelled in accordance with regulation 1999/45/EC, 1272/2008, the statutory instrument No.716 2009 Chemicals (Hazard Information and Packaging) regulations and the EC Fertiliser Regulations 2003,

## Expanded Perlite

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Regulation (EC)

### 15.2 Chemical Safety Assessment

CSA not undertaken for this mixture

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## 16. OTHER INFORMATION

### SDS information:

This Safety data sheet is compiled using data submitted for raw materials and practical experience.

This Safety Data Sheet is prepared in compliance with Directive 1999/45/EC, regulation 1272/2008 and Annex I of the REACH regulation 453/2010.

THE INFORMATION GIVEN HEREIN IS, TO THE BEST OF OUR KNOWLEDGE, CORRECT AND IS PRESENTED IN GOOD FAITH BUT NO WARRANTY, EXPRESSED OR IMPLIED IS GIVEN.

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