

SAFETY INFORMATION SHEET

Date of Issue: November 2012

Revision date: May 2016

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY

1.1 Product identifier

PERLITE

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture: Growing media additive

1.3 Details of the supplier of the safety data sheet

Vitax Limited
Owen Street
Coalville
LE67 3DE Tel: 01530 510060 Email: info@vitax.co.uk
Tel: 01530 510060 (Office Hours)

1.4 Emergency Contact:

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

(Regulation (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2 Label elements

(Regulation (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.3 Other hazards

Depending on the handling and use (grinding, drying, bagging), airborne respirable dust may be generated. Dust contains respirable crystalline silica. Prolonged and or massive inhalation of respirable crystalline silica dust may cause lung fibrosis, commonly referred to as silicosis. Principal symptoms of silicosis are coughing and breathlessness. Occupational exposure to respirable dust should be monitored and controlled. The product should be handled using methods and techniques that minimize or eliminate dust formation. The product contains less than <0.7 % RCS (respirable crystalline silica) and does not need to be classified and labelled. This material is not considered to be persistent, bioaccumulating nor toxic (PBT), very persistent nor very bioaccumulating (vPvB).

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixture

Amorphous, hydrated glassy volcanic rock of rhyolitic composition. Main components are silicon oxide, aluminium oxide and alkali oxides (>90 wt%).

Component	CAS No/ EINECS	Symbol(s)	H-phrases(s)	Concentration [%]
Perlite	1318-00-09 / 310-127-6	No Classification	-	85 -95%
Alpha Quartz	14808-60-7 / 238-878-4			<0.7%
Mica/illite		No Classification	-	trace
feldspar		No Classification	-	trace

4. FIRST AID MEASURES

Eye contact:

If in eyes, immediately wash out with plenty of water. See medical doctor if particles are still lodged in eye.

Skin contact:

Harmless & non-irritant.

Ingestion:

Do not induce vomiting. Wash out mouth with water and give plenty of water to drink. Obtain medical attention

Inhalation:

Induce coughing.

4.1. Most important symptoms and effects, acute and delayed

The symptoms can be acute pain in the eye, by the ingress of dust. No delayed effects anticipated if first aid measures are applied.

4.2. Indication of immediate medical attention and special treatment methods

No need for immediate medical attention.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing

No restrictions on use of extinguishers in case of fire or in its vicinity. Use fire fighting measures that suit the environment.

5.2. Special risks arising from the material

The material is non-flammable and does not support fire. No hazardous thermal decomposition.



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5.3. Advice for fire fighters

Firefighters must be equipped with personal protective equipment appropriate for the area.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid dust formation. In case of exposure to high level of airborne dust, wear a personal respirator and safety goggles in compliance with national legislation.

6.2. Environmental precautions

No special requirement. Waste generated during application and spills are not considered hazardous. Disposal in accordance with local regulations.

6.3. Methods and materials for containment and clean up

Avoid sweeping and use a vacuum system to prevent dust in the air. Wear breath protective masks and goggles during clean-up in line with national legislation.

6.4 Reference to other sections

See sections 8 and 13.

7. HANDLING AND STORAGE

7.1. Handling

Avoid airborne dust generation. Provide appropriate exhaust ventilation at places where airborne dust is generated. In case of insufficient ventilation, wear suitable respiratory protective equipment. Handle packaged products carefully to prevent accidental bursting.

Advice on general occupational hygiene.

If you require advice on safe handling techniques, please contact your supplier or check the Good Practice Guide referred to in section 16.

Avoid airborne dust generation and keep dust levels to minimum. General occupational hygiene measures are required to ensure safe handling of the substance. These measures involve good personal and housekeeping practices (i.e. regular cleaning with suitable cleaning devices), no drinking, eating and smoking at the workplace. Shower and change clothes at end of work shift. Do not wear contaminated clothing at home.

7.2. Storage

Minimise airborne dust generation and prevent wind dispersal during loading and unloading. Keep containers closed and store packaged products so as to prevent accidental bursting.

7.3 Specific end use(s)

If you require advice on specific uses, please contact your supplier or check the Good Practice Guide referred to in section 16.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Maintain personal exposure below occupational exposure limit for inhalable and respirable dust as dictated in the national legislation.

8.2 Exposure controls

8.2.1. Appropriate engineering controls

Minimise airborne dust generation. Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below specified exposure limits. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne particles below the exposure limit. Apply organisational measures e.g. by isolating personnel from dusty areas. Remove and wash contaminated clothing.

8.2.2. Individual protection measures, such as personal protective equipment:

Respiratory protection:

in case of prolonged exposure to airborne dust concentrations, wear a respiratory protective equipment that complies with the requirements of European and national legislation.

Hand protection:

appropriate protection (e.g. gloves, barrier cream) is recommended for workers who suffer from dermatitis or sensitive skin. Wash hands at the end of each work session.

Eye protection:

wear safety glasses with side-shields in circumstances where there is a risk of penetrative eye injuries.

Skin protection:

normal work clothes. For hands see above.

8.2.3. Environmental Exposure Controls

Avoid wind dispersal.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	White, graded material less than 7 mm depending on specifications
Odour	Odourless
pH-value	6.5 - 7.5 (10% solids in water suspension)
Boiling point/boiling range	Not applicable.
Melting point/melting range	1250-1350°C.

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Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability	Not flammable.
Explosive limits	Non explosive (void of any chemical structures commonly associated with explosive properties).
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Specific density	2.2-2.4 g/cm ³
Bulk density	70-100 kg/m ³
Solubility in water	Negligible.
Partition coefficient n-octanol/water	Not applicable.
Auto ignition temperature	Does not burn.
Decomposition temperature	Not applicable.
Explosion limits	Not applicable.
Viscosity	Not applicable.
Oxidizing properties	No oxidizing properties (Based on the chemical structure, the substance does not contain a surplus of oxygen or any structural groups known to be correlated with a tendency to react exothermally with combustible material).

9.2 Other information

None.

10. STABILITY AND REACTIVITY

10.1 Reactivity	Inert, non reactive
10.2 Chemical stability	Chemically stable.
10.3 Possibility of hazardous reactions	No hazardous reactions.
10.4 Conditions to avoid	None in designated use.
10.5 Incompatible materials	Avoid storing together with materials that may be affected by dust.
10.6 Hazardous decomposition products	None.

11. TOXICOLOGICAL INFORMATION

11.1. Acute toxicity	The product does not meet the criteria for classification as hazardous according to EC Regulation 1272/2008 and Directive 67/548/EC as amended.
contains < 0.7% w/w RCS (respirable crystalline silica) Acute toxicity	Based on available data, the classification criteria are not met. Classification for acute toxicity is not warranted.
Skin corrosion/irritation	Not irritant to skin. Based on available data, the classification criteria are not met. Classification for corrosion/irritation is not warranted.
Serious eye damage/irritation	Mild irritant to eyes. Based on available data, the classification criteria are not met. Classification for serious eye damage/irritation is not warranted.
Respiratory or skin sensitisation	Based on experience in handling, Perlite may cause a mild irritation of the upper respiratory part and is not considered to be a skin sensitizer. Classification for respiration and sensitization is not warranted.
STOT-single exposure	Based on available data, the classification criteria are not met and classification for STOT-single exposure is not warranted.
STOT - repeated exposure	Based on available data, the classification criteria are not met and classification for STOT - repeated exposure is not warranted.
Germ cell mutagenicity	Based on available data, classification genotoxicity is not warranted.
Carcinogenicity	Based on available data, classification for carcinogenicity is not warranted.
Reproductive toxicity	Based on available data, classification for reproductive toxicity is not warranted.
Aspiration hazard	Based on experience in handling perlite, classification criteria are not met.

12. ECOLOGICAL INFORMATION

12.1. Eco toxicity	Based 96h bioassays the product is not toxic for <i>Vibrio fischeri</i> , <i>Artemia franciscana</i> and <i>Sparus Aurata</i> . Based on field studies the product is not toxic for <i>Patella sp.</i> and <i>Monodonta sp.</i>
12.2 Persistence and degradability	Not relevant for inorganic substances.
12.3 Bioaccumulative potential	Not relevant for inorganic substances.
12.4 Mobility in soil	Negligible.
12.5 Results of PBT and vPvB assessment	Not relevant for inorganic substances.
12.6 Other adverse effects	No specific adverse effects are known.

13. DISPOSAL CONSIDERATIONS

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13.1 Waste treatment methods

The residues/unused product can be disposed in landfills following National and local regulations. Dispose in such a way to avoid dust generation. Where possible, recycling should be preferred to disposal.

Packaging: no specific requirements. In all cases dust formation from residues in the packaging should be avoided and suitable protection be assured.

14. TRANSPORT INFORMATION

14.1 Land transport ADR

Not a dangerous substance as defined in the above regulations.

Tunnel restriction code:

Not relevant

14.2 Sea transport IMDG

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport IATA-DGR

Not classified as dangerous in the meaning of transport regulations.

14.4 Special precautions for user

Not relevant

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant

15. REGULATORY INFORMATION

Other EU regulations

Perlite is not a SEVESO substance, not an ozone depleting substance and not a persistent organic pollutant.

National legislation requirements

Refer to the regulatory exposure limits for workforce enforced in each country (see Annex 1 and link in section 8). The product and any of the by-minerals contained have not been classified at the EU level, under the dangerous substances and preparations regulation.

International legislation requirements

The product (perlite) is not separately classified by the Occupational Health and Safety Administration (OSHA). The product has not been classified as a human carcinogen by OSHA, the International Agency for Research on Cancer (IARC) and the National Toxicology Program (NTP).

Table 1: Occupational exposure limits for perlite and crystalline silica

	OSHA, PEL – TWA, mg/m ³	ACGIH, TLV – TWA, mg/m ³	NIOSH, REL – TWA, mg/m ³
Perlite			
Respirable dust	5	3	
Total dust	15		
Inhalable dust		10	
Quartz			
Respirable dust	10/(2+% SiO ₂)	0.05	0.05
Total dust	30/(2+% SiO ₂)		

15.2 Chemical Safety Assessment

Not carried out for this mixture.

16. OTHER INFORMATION

Reason for revision:

Replaces version dated November 2012. Revised format- all sections updated.

Liability

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.