

Version 03 Date reviewed 17/05/2024

MATERIAL SAFETY DATA SHEET - CRUDE VERMICULITE (ALL GRADES)

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

Product Name: Namekara Vermiculite (All Grades)Substance: Crude VermiculiteCAS No.: 1318-00-09

1.2. Relevant identified uses of the Substance or Mixture and uses advised against

- Fire resistant boards and refractory mouldings and shapes.
- Inert carrier in animal feed.
- Growing Media additives and Horticultural soil improver.
- Insulation Material in construction and light weight aggregates.

Uses advised against and reason.

- External cavity wall insulation- Can absorb moisture.
- **1.3. Details of the supplier of the safety data sheet Namekara Mining Company Ltd** Off Mbale-Tororo Road 11kms from Mogodesi Trading Centre

Butiru - Bugobero Manafwa District P.O BOX 2368, Mbale Uganda. Email: <u>admin@namekara.com</u> Tel: +256 785687705

1.4. Emergency Telephone Number Contact : +256 785687705 Language : English Availability : Mon-Fri, 7am-7pm ((EAT)

SECTION 2. HAZARD IDENTIFICATION

2.1. Classification of the substance/Mixture

2.1.1. Classification according to Regulation (EC) No. 1272/2008

Namekara Vermiculite is a Non-Hazardous substance and does not meet the criteria for classification in any hazard class.

2.1.2. Additional information

Section 8 gives more information on workplace exposure limits.

2.2. Label Elements

2.2.1. Labeling according to Regulation (EC) No. 1272/2008

Hazard Pictogram(s) None Signal Word None Hazard Statement (s) None Precautionary Statement (s) None Supplement Hazard Information None

2.3 Other hazards

None

This substance does not contain any components fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria. Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties

in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Material	CAS No.	Typical Composition
Vermiculite*	1318-00-9	100%
Crystalline Silica	14808-60-7	<0.01%

*Vermiculite is a hydrated Magnesium-Aluminum-Iron Silicate.

- 3.2. Mixtures
 - Not applicable

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

4.1.1. General Information

No serious adverse effects are anticipated. If seeking medical advice, show this safety data sheet to the medical professional.

4.1.2. Following Inhalation

If large amounts of dust are inhaled, immediately remove exposed person to fresh air. Where distress or difficulty in breathing is observed administer oxygen or CPR and seek immediate medical attention.

4.1.3. Following Skin contact

This material is considered harmless, however if irritation occurs wash affected skin with plenty of running water and soap. Seek medical attention if irritation persists after washing.

4.1.4. Following eye contact

Immediately flush with clean running water while holding the eye lids apart and if redness, irritation, or pain persists seek medical attention.

4.1.5. Following Ingestion

Vermiculite is not harmful as it is used as a carrier in Animal feed. There are no known adverse effects for small quantities and hence first aid measures are not usually required.

4.1.6. Self-Protection of the first aider Loose material can be a potential slip hazard. Wear gloves to protect against skin irritation.

- 4.2. Most important symptoms and effects, both acute and anticipated.
- 4.2.1. General information

Significant acute and delayed effects are not anticipated.

4.2.2. Symptoms and effects

When properly dry, dust from this product may cause irritation to eyes, nose, and throat.

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

- 4.3.1. Specific treatment
 - Treat symptomatically.
- 4.3.2. Notes to the doctor

No special antidote required.

SECTION 5. FIRE FIGHTING MEASURES

5.1. Extinguishing media

- 5.1.1. General Information
- Vermiculite is a non-combustible substance, however packaging and surrounding may be combustible. **5.1.2. Suitable extinguishing media**
- Use an extinguishing agent suitable for the surrounding fire.
- 5.1.3. Unsuitable extinguishing media No product specific restrictions.
- 5.2. Special hazards arising from the substance or mixture.

5.2.1. General information

- Loose material may be a slip hazard.
- 5.2.2. Hazardous combustion products
 - Not applicable, Material is non-combustible substance.

5.2.3. Advice for fire fighters

No specific firefighting equipment is required except for the packaging and sorrounding.

SECTION 6. ACCIDENTAL RELEASE MEASURE

6.1. Personal precautions, protective equipment, and emergency procedures

6.1.1. For non-emergency personnel

- Use personal protective equipment to protect your eyes, skin, and clothing. Loose material may be a slip hazard.
- 6.1.2. For emergency responders
 - Use personal protective equipment.
- 6.2. Environmental precautions

Prevent large amounts of the product from entering drains, sewers, or watercourses. Protect from wind to prevent dispersion and dust creation.

6.3. Methods and material for containment and cleaning up.

6.3.1. For Containment

Contain and prevent dispersion by erecting temporary barriers.

6.3.2. For cleaning up

Sweep or vacuum up and transfer in a suitable, labeled container. Avoid dust creation and wind dispersal by wet sweeping.

6.3.3. Disposal and other information Clear spills immediately to reduce slip hazard. Dispose of in compliance with local and national regulations

6.3.4. Reference to other sections Suitable personal protective equipment is quoted in section 8. Further information on waste and disposal is given in section 13.

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

7.1.1. Protective measures

Spilt products should be treated as a slip hazard.

Handle the product in a manner that minimizes the generation of dust hence ensure usage of engineering controls as well as ensure adequate ventilation in the working areas. Wear personal protective equipment.

Remove contaminated clothing and protective equipment before entering eating areas.

7.1.2. Measures to prevent fire.

This product is non-flammable. No special fire protection measures are necessary.

7.1.3. Measures to prevent aerosol and dust generation.

Reseal packaging when not in use. Use engineering controls (e.g. local dust extraction) to provide effective dust control to ensure compliance with the current occupational exposure limits.

7.1.4. Measures to protect the environment.

Do not dispose of excess material or spillages in drains.

7.1.5. Advice on general occupational Hygiene

Wash hands after using the product and regularly during use.

Do not eat, drink, or smoke in working areas when using this product.

Remove contaminated clothing and protective equipment before entering eating places.

7.2. Conditions for storage, including any incompatibilities.

7.2.1. Technical measures and storage conditions

Store in original packaging. Protect packaging from damage.

7.2.2. Requirements for storage rooms and vessels

Store in dry conditions and keep containers closed. Use engineering controls (e.g. local dust extraction) to provide effective dust control to ensure compliance with the current occupational exposure limits.

7.2.3. Specific end use(s) Recommendations

Observe instructions for use.

Wear a suitable mask if local dust extraction is not in us.

Wear protective clothing including gloves and goggles.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters.

Substance	CAS Number	EH40/2005 Workplace Exposure limits
Vermiculite	1318-00-09 Substance not listed in EH40/2005	
		For WELs, treat as nuisance dust (EH40 section 44)

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Local dust extraction

8.2.2. Individual protection measures

Eyes: Goggles-no specific type recommended

Hands: Protective gloves if required- no specific type recommended

Skin: For workers with sensitive skin, general protective overalls are recommended

Use of dust masks of category FFP2 and EN149 compliant. **Respiratory:**

Provision of dust suppression/extraction and ventilation where dust is produced is recommended.

Golden brown

Not Applicable

Not flammable

Not applicable

No data available

No data available

Not applicable

Not applicable

350-800Ka/M³

Not applicable

Not soluble No data available

Not applicable-Not flammable

None

1,330°C

5.1-7.5

8.2.3. Environmental exposure

Use appropriate engineering controls to prevent dust from escaping to the atmosphere.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties Solid Flakes

- Physical state a)
- Colour b)
- Odour and Odour threshold C)
- d) Melting point
- e) Boiling point
- Flammability f)
- Lower and upper explosive limits g)
- h) Flash point
- i) Auto-ignition temperature
- j) **Decomposition temperature**
- PH k)
- **Kinetic Viscosity** I)
- m) Solubility-in water
- Partition coefficient; n-octanol/water n)
- Vapour pressure **o**)
- **Relative density** p)
- **Relative Vapour density** a)
- 9.2. Other information

Not available

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

Not likely to react if stored and handled as recommended.

- 10.2. Chemical stability
- Stable under normal conditions
- 10.3. Possibility of hazardous reactions
 - If used as recommended no hazardous reactions are to be expected.
- 10.4. Conditions to avoid. Self-attrition may lead to the formation of dust. High humidity may lead to the product absorbing water.
- 10.5. Incompatible materials Avoid contact with strong oxidizers and strong acids. 10.6. Hazardous decomposition products
 - None is expected.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

11.1.1. Acute Toxicity

- Classification criteria are not met.
- Skin corrosion/irritation 11 1 2
- No known hazards. Irritation is not usually anticipated with Vermiculite product save for the dust. 11.1.3. Serious eye damage/irritation
- Particulate matter may cause physical damage and irritation.
- Respiratory or sensitization 11.1.4.
 - Dust may cause minor transient respiratory irritation at high concentrations.
- 11.1.5. Germ cell mutagenicity

No known hazards.

- 11.1.6. Carcinogenicity
 - No known hazards
- **11.1.7.** Reproductive toxicity No known hazards.
- 11.1.8. STOT-single exposure No known hazards

11.1.9. STOT-repeated exposure

The quartz content of this product is <1% with the inhalable/respirable fraction much lower. However repeated exposure to respirable crystalline silica may cause lung and respiratory diseases.

11.1.10. Aspiration Hazard

Dust may cause irritation at high concentrations.

11.2. Information on likely routes of exposure

The most likely route of exposure is by skin contact or via airborne dust product through handling.

11.3. Information on other hazards

11.3.1 Endocrine disrupting properties

The product does not contain any components that exhibit endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU)2018/605 in quantities of 0.1% or more.

11.3.2 Other information None

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity

No adverse effects are expected on aquatic life. Vermiculite is commonly used as a soil conditioner as well as a carrier material in animal feeds.

12.2. Persistence and degradability

This product is not readily biodegradable.

- 12.3. Bioaccumulative potential
- Not applicable

12.4. Mobility in soil Not applicable

12.5. Result of PBT and vPvB assessment

This substance/mixture is not classified as PBT or vPvB according to EU criteria.

12.6. Other adverse effects

No adverse effects expected if recommendations and advice on storage and handling are observed.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods.

This product is not classified as hazardous waste under European commission directive 2008/98/EC. Dispose of according to national and local regulations.

SECTION 14. TRANSPORT INFORMATION

14.1. UN number

- Not applicable
- **14.2. UN proper shipping name** Not applicable
- 14.3. Transport hazard class (es) Not classified.
- 14.4. Packaging group
 - Not classified.
- 14.5. Environmental hazards Not classified.
- 14.6. Special precautions

```
Not applicable.
```

14.7. Maritime Transport in bulk according to IMO instruments (Annex II of MARPOL and the IBC Code) Not applicable.

SECTION 15. REGULATORY INFORMATION

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

Regulation (EC) No. 2037/2000 (substances that deplete ozone) Not applicable Regulation (EC) No. 850/2004 (persistent organic pollutants) Not applicable Regulation (EC) No. 689/2008 (concerning the export and import of dangerous chemicals) Not applicable Regulation (EC) No. 1272/2008 (Classification, Labelling and Packaging of substance)

Regulation (EC) No. 1272/2008 (Classification, Labelling and Packaging of substances and mixtures)

This material does not meet any of the criteria.

Regulation (EC) No. 1907/2006 (Registration, Evaluation, Authorization & Restriction of Chemicals (REACh))

Vermiculite is a naturally occurring product that has not been chemically modified.

Article 2 (7) (b) and Annex V paragraph 7, of the REACh regulations exempts this material from REACh registration.

US FEDERAL REGULATIONS

Listed on the United States TSCA (Toxic Substances Control Act) inventory.

Source of Reference for OELs

HSE EH40 for Workplace Exposure Limits

15.2. Chemical safety assessment

No chemical safety assessment has been done as the substance is exempt from REACH registration.

SECTION 16. OTHER INFORMATION

16.1. Training advice

All employes should be given adequate training in the proper use and handling of this product and any precautions and protective equipment required under the applicable regulations.

SECTION 17. LIABILITY

Namekara Mining Company Uganda Limited believes this information to be accurate and reliable as at the date of publication. However, no representation, warranty, or guarantee is made or implied in respect of the accuracy, reliability or completeness of the information contained herein.

It is the user's responsibility to satisfy themselves as to the suitability and completeness of such information for their own particular uses.

DATE OF ISSUE: May 17, 2024