GEOHELLAS

PRODUCT SAFETY DATA SHEET

AGLEV® SI Granular Products

According to Regulation (EC) 1907/2006,
Regulation (EC) 1272/2008, Regulation (EC) 453/2010 and Regulation (EU) 2020/878

Revision Date: 22 February 2023 | **Version: 3.0/EN** | **Printing Date: 23 February 2023**

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

1.1. Product Identifier

Trade name: AGLEV SI 100, AGLEV SI 150 Premium, AGLEV SI 200

REACH Registration Number: According to par. 7 of ANNEX V of reg. (EC) 1907/2006, minerals occurring in nature, which are not chemically modified, are exempted from registration. All above mentioned products fall within this definition.

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

This clay product can be used as soil improver.

1.3. Details of the supplier of the safety data sheet

GEOHELLAS
Pentelis 8A, Palaio Faliro
Athens 175 64
GREECE
Office: + 30 210 9485800
E-mail: agri@geohellas.com

1.4. Emergency telephone number: Greece + 30 210 9485800, Cyprus 1401

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance

This product contains less than 1% w/w RCS (respirable crystalline silica)*, and therefore does not meet the criteria for classification as hazardous, according to EC Regulation 1272/2008 as amended.

This product is NOT classified as hazardous, according to IARC Monographs on the evaluation of carcinogenic risks to humans, Volume 68 (1997) " Silica, some Silicates, coal dust and Para-Aramid Fibrils", page 441 https://monographs.iarc.fr/iarc-monographs-on-the-evaluation-of-carcinogenic-risks-to-humans-53/

* RCS determined by the SWeRF method ("Size-Weighted Respirable Fraction"). All details about the SWeRF method are available at www.crystallinesilica.eu.

2.1.1. Classification according to Regulation (EC) 1272/2008 (CLP)

Not classified.

2.2. Label elements

Observe the normal safety regulations when handling chemicals.
The product is not subject to identification regulations under EC Directives and the Ordinance on Hazardous Materials.

2.2.1. Labeling according to Regulation (EC) 1272/2008 (CLP)

Not applicable

Hazard statements:
Not applicable

Precautionary statements:
Not applicable

Indication of danger:
Not applicable

Risk phrases:
Not applicable

Safety phrases:
Not applicable

2.3. Other hazards

This product is an inorganic substance and does not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH.
The material is not known to have an adverse effect on the endocrine system in accordance with the criteria stated within Regulation (EU) 2017/2100 or Regulation (EU) 2018/605.
The most severe adverse reactions to human health when using the material/preparation:
None were observed.
The most severe adverse reaction to the environment when using the material/preparation:
None were observed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

This clay product is a UVCB substance sub-type 4.

3.1. Substances

Name	CAS Number	EINECS Number	Concentration Range
Attapulgite clay (short palygorskite fibres <5 μm)	12174-11-7[1]	310-127-6*	>90%
Quartz	14808-60-7	238-878-4	<10%

[1]the CAS number refers to both long palygorskite fibres >5μm (hazard classification 2B) and short palygorskite fibres <5μm (hazard classification 3)

(*) As "naturally occurring substances"

Impurities

Not applicable for a UVCB substance.

4. FIRST AID MEASURES

4.1. Description of first aid measures

General advice

No known delayed effects.

Following inhalation

No first aid measures required; move source of dust or move person to fresh air. Seek medical advice in case of irritation.

Following skin contact

No first aid measures required; wash affected area with soap and water. Seek medical advice in case of irritation.

Following eye contact

Rinse eyes immediately with plenty of water. Seek medical advice in case of irritation.

Following ingestion

No first aid measures; clean mouth with water and drink afterwards plenty of water. Seek medical advice in case of irritation.

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

Irritation of the eyes, because of dust entry. No delayed effects are anticipated, if first aid treatment is applied and is effective.

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

No need for immediate medical attention; follow the advice given in section 4.1

5. FIRE FIGHTING MEASURES

5.1. Extinguishing media

5.1.1. Suitable extinguishing media

Suitable extinguishing media: The product is not combustible. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.1.2. Unsuitable extinguishing media

No restriction on the extinguishing media to be used in cases of fire in its vicinity.

5.2. Special hazards arising from the substance or mixture

The material is not flammable and it does not support fire. No hazardous thermal decomposition products.

5.3. Advice for fire fighters

Avoid generation of dust. Use breathing apparatus.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Ensure adequate ventilation.
Keep dust levels to a minimum.
The usual precautionary measures should be adhered to general rules for handling chemicals.
Avoid inhalation of dust – ensure that sufficient ventilation or suitable respiratory protective equipment is used, wear suitable protective equipment (see section 8).

6.1.2. For emergency responders

Ensure adequate ventilation.
Keep dust levels to a minimum.
The usual precautionary measures should be adhered to general rules for handling chemicals.

Avoid inhalation of dust – ensure that sufficient ventilation or suitable respiratory protective equipment is used, wear suitable protective equipment (see section 8).

6.2. Environmental precautions

No special requirement.
Contain the spillage. If product is released on the road, place signposts to divert traffic, and collect the spill mechanically avoiding dust generation.

6.3. Methods and material for containment and cleaning up

Avoid dust generation; avoid dry sweeping
Use vacuum suction unit, or shovel into bags.

6.4. Reference to other sections

For more information on exposure controls/personal protection or disposal considerations, please see Section 7 for information on safe handling, Section 8 for information on personal protection equipment, and Section 13 for information on disposal.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

7.1.1. Protective measures

Keep dust levels to a minimum.
Provide appropriate exhaust ventilation at places where airborne dust is generated. In case of insufficient ventilation, wear suitable respiratory protective equipment refer to section 8 of this safety data sheet. Handle packaged products carefully to prevent accidental bursting. If you require advice on safe handling techniques, please contact your supplier or check the Good Practice Guide referred to in section 16.

7.1.2. Advice on general occupational hygiene

Keep dust levels to a 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. Conditions for safe storage, including any incompatibilities

Minimize 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. The occupational exposure limit for respirable crystalline silica in EU countries is given in: http://www.nepsi.eu.

General threshold values for dust are:
- inhalable fraction: 10 mg/m^3
- respirable fraction: 3 mg/m^3

8.1.1.Occupational Exposure Limits in mg/m^3 8 hours TWA

The value for respirable crystalline silica dust is 0.1 according to European Directive 2398/2017.

Biological limit values

None.

8.1.2. Appropriate technical control

None.

8.1.3. Exposure limit values and / or biological limit values for contaminated air

None.

8.1.4. Values of DNEL/DMEL and PNEC

None

8.2. Exposure controls

8.2.1.Appropriate engineering controls

Minimize 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 organizational measures e.g. by isolating personnel from dusty areas. Remove and wash soiled clothing

8.2.2.Individual protection measures, such as personal protective equipment

8.2.2.1. Eye/face protection

Do not wear contact lenses. For powders, tight fitting goggles with side shields, or wide vision full goggles. It is also advisable to have individual pocket eyewash.

8.2.2.2. Skin & hands protection

For skin, normal work clothes are appropriate.
For hands, 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.

8.2.2.3. Respiratory protection

Regulate ventilation to keep dust levels below established threshold values. In case of prolonged exposure to airborne dust concentrations, a suitable particle filter mask that complies with the requirements of national legislation is recommended, depending on the expected exposure levels. levels - Category 2 or 3 (FP2 - FP3). See EN 143:2000 - Respiratory protective equipment.

8.2.3.Environmental exposure controls

All ventilation systems should be filtered before discharge to atmosphere.
Avoid releasing to the environment. Contain the spillage.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Form: granules

Color: light grey

Odour: odourless

Odour threshold: not applicable

pH: 8 (5% solids in water suspension at 20 °C)

Melting point: > 800°C

Boiling point: not applicable (solid with a melting point > 450 °C)

Flash point: not applicable (solid with a melting point > 450 °C)

Evaporation rate: not applicable (solid with a melting point > 450 °C)

Flammability: non flammable

Explosive limits: non explosive

Vapour pressure: not applicable (solid with a melting point > 450 °C)

Vapour density: not applicable

Specific gravity density: 2.2 g/cm³

Bulk density: 0.7-0.8 g/cm³

Solubility in water: negligible

Partition coefficient: not applicable (inorganic substance)

Auto ignition temperature: not self-igniting

Decomposition temperature: not applicable

Viscosity: not applicable

Solvent content:

Organic solvents: 0.0 %

Water: 10-14 %

9.2. Other information

Not available

10. STABILITY AND REACTIVITY

10.1. Reactivity

Inert, not reactive

10.2. Chemical stability

Chemically stable

10.3. Possibility of hazardous reactions

No hazardous reaction

10.4. Conditions to avoid

Product may become slippery when wet.

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. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Classification according to GHS (1272/2008/EC, CLP)

This substance does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

Acute Toxicity/Effects

Acute toxicity: Virtually nontoxic after a single ingestion.

Oral (rat LD50): The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Inhalation (rat LC50): No information available.

Dermal (rat LD50): No information available.

Irritation/Corrosion: Not expected to be an eye irritant. Not expected to be a skin irritant. Inhalation of dust may cause respiratory tract irritation, coughing and breathing difficulties. The product has not been tested. The statement has been derived from the properties of the individual components.

Skin: Based on available data, the classification criteria are not met.

Eye: Based on available data, the classification criteria are not met.

Sensitization: The chemical structure does not suggest a sensitizing effect. The product has not been tested. The statement has been derived from the properties of the individual components.

Aspiration hazard: Based on available data, the classification criteria are not met.

Chronic Toxicity/Effects

Genetic toxicity: Assessment of mutagenicity: No data available concerning mutagenic effects.

Carcinogenicity: Attapulgite (also known as palygorskite) is a hydrated magnesium silicate with magnesium partially replaced by aluminium and iron. The mineral has an elongated morphology. According to IARC Monograph, Volume 68, 1997: Short palygorskite (attapulgite) fibers (<5 micrometers) cannot be classified as to their carcinogenicity to humans (Group 3). The attapulgite present in this product contains fibers less than 5 um in length, and therefore is considered by IARC as Group 3.

Additional toxicological information

The product is not subject to classification according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version. When used and handled according

to specifications, the product does not have any harmful effects according to our experience and the information known to us.

11.2. Endocrine disrupting properties

None of the ingredients is listed.

11.3. Information on other hazards

There is no additional information.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Acute/Prolonged toxicity to fish

No data available.

12.1.2. Acute/Prolonged toxicity to aquatic invertebrates

No data available.

12.1.3. Acute/Prolonged toxicity to aquatic plants

No data available.

12.1.4. Toxicity to micro-organisms e.g. bacteria

No data available.

12.1.5. Chronic toxicity to aquatic organisms

No data available.

12.1.6. Toxicity to soil dwelling organisms

No data available.

12.1.7. Toxicity to terrestrial plants

No data available.

12.1.8. General effect

No specific adverse effects known.

12.1.9. Further information

None

12.2. Persistence and degradability

Not relevant for inorganic substances

12.3. Bioaccumulative potential

Not relevant for inorganic substances

12.4. Mobility in soil

Almost insoluble and thus presents a low mobility in most soils.

12.5. Results of PBT and vPvB assessment

Not relevant for inorganic substances

12.6. Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

12.7. Other adverse effects

No other adverse effects are identified.

13. DISPOSAL CONSIDERATIONS

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.

Substance / preparation disposal: Storage category 0.

Contaminated packing disposal: Secondary utilization, storing, incineration. In all cases dust formation from residues in the packaging should be avoided and suitable protection be assured.

14. TRANSPORT INFORMATION

The material is not classified as a dangerous substance and no restrictions apply for land/sea/air transportation. Avoid spreading dust.

14.1. UN-Number

Not relevant

14.2. UN proper shipping name

Not relevant

14.3. Transport hazard class(es)

ADR: Non hazardous
IMDG: Non hazardous
ICAO/IATA: Not restricted
RID: Not classified

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not relevant

14.6. Special precautions for user

Avoid any release of dust during transportation, by using air-tight tanks for powders and covered trucks for pebbles.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not regulated.

15. REGULATORY INFORMATION

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

Authorizations: Not required

Restrictions on use: None

EC regulations:

Observe the normal safety regulations when handling chemicals.

The product is not subject to identification regulations under EC Directives and the Ordinance on Hazardous Materials.

Other EU regulations: Product is not a SEVESO substance, not an ozone-depleting substance and not a persistent organic pollutant.

National regulations: Refer to the regulatory exposure limits for workforce enforced in each country (see Annex 1 and link in section 8).

Water hazard class: Generally not hazardous for water.

15.2. Chemical safety assessment

Product is exempted from REACH registration in accordance with Annex V.7.

16. OTHER INFORMATION

16.1. Information about revision of safety data sheet

Changes in terminology and requirements according to COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).
REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006, as amended.
Data are based on our latest knowledge but do not constitute a guarantee for any specific product features and do not establish a legally valid contractual relationship.

16.2. Hazard Statements

Not relevant

16.3. Precautionary Statements

Not relevant

16.4. Risk Phrases

Not relevant

16.5. Safety Phrases

Not relevant

16.6. Abbreviations

UVCB: Substances of Unknown or Variable composition, Complex reaction products or Biological materials

CAS: Chemical Abstracts Service

EINECS: European Inventory of Existing Commercial chemical Substances

PBT: persistent, bioaccumulative, toxic chemical

vPvB: very persistent, very bioaccumulative chemical

SWeRF: Size-Weighted Respirable Fraction

Disclaimer

Compliance with a specific legal document is to be understood as compliance with all its relevant amendments, issued until the date of the last modification of this SDS.

This safety data sheet (SDS) is based on the legal provisions of the REACH Regulation ((EC) 1907/2006; article 31 and Annex II), as amended. Its contents are intended as a guide to the appropriate precautionary handling of the material. It is the responsibility of recipients of this SDS to ensure that the information contained therein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. Information and instructions provided in this SDS are based on the current state of scientific and technical knowledge at the date of issue indicated. It should not be construed as any guarantee of technical performance, suitability for particular applications, and does not establish a legally valid contractual relationship. This version of the SDS supersedes all previous versions.

END OF DATA SHEET