Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifiers

SIHA Activebentonite G
SIHA PURANIT
SIHA PURANIT UF
SIHA Ca-Bentonite G
SIHA Mustbentonite G
NA/CA Bentonite

The substance does not require registration according to Regulation (EC) No 1207/2006 [REACH]: X

Use of the substance/ preparation: Product for wine- and fruitjuice treatment.

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

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/ downstream user/distributor): Eaton Technologies GmbH
Begerow Product Line
An den Nahewiesen 24
55450 Langenlonsheim
Telephone: +49 6704 204-0
Telefax: +49 6704 204-121
E-mail (competent person): SDB@Eaton.com
Dept. responsible for information: Produktmanagement
Only available during office hours.
Information telephone: +49 6704 204-0

1.4. Emergency telephone number

Dept. responsible for information: Produktmanagement
Only available during office hours.
Emergency telephone: +49 6704 204-0

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP):
none/none
Classification according to Directive 67/548/EEC or 1999/45/EC:
none/none
Further remarks:
Avoid inhalation and/or exeeding of occupational limit value.
No risks worthy of mention. Please observe the information on the safety data sheet at all times.

2.2. Label elements

Labelling (67/548/EEC or 1999/45/EC):

S-phrases:

S-phrases	
S22	Do not breathe dust.

Labelling (CLP)

Safety precautions:

Safety precautions:	
P260.1	Do not breathe dusts or mists.

2.3. Other hazards

Possible harmful physico-chemical effects:
The product contains less than 1% w/w RCS (respirable crystalline silica) as determined by the SWERF method. The respirable crystalline silica content can be measured using the "Size-Weighted Respirable Fraction - SWERF" method. All details about the SWERF method is available at www.crystallinesilica.eu. 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 cough 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 generation.
The substance does not meet the criteria for PBT or vPvB substance.

SECTION 3: Composition / Information on ingredients

Chemical characterization (preparation):
EC-No.: 215-108-5
CAS-No.: 1302-78-9
Synonyms: Bentonite, sodian; Bentonite, calcian; Montmorillonite, Sodium-activated Bentonite
Bentonite is a UVCB substance, sub-type 4. The purity of the product is 100 % w/w.

SECTION 4: First aid measures

4.1. Description of first aid measures
After inhalation:
Provide fresh air. Immediately get medical attention.
In case of skin contact:
Subsequently wash off with: Water and soap.
In case of eye contact:
In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.
After ingestion:
Rinse mouth immediately and drink plenty of water.

4.2. Most important symptoms and effects, both acute and delayed
No known symptoms to date.

4.3. Indication of any immediate medical attention and special treatment needed
Information to physician:
Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media:
The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.
Carbon dioxide (CO2). Atomized water. Foam. Extinguishing powder.
Extinguishing media which must not be used for safety reasons:
High power water jet.

5.2. Special hazards arising from the substance or mixture
Special exposure hazards arising from the substance or preparation itself, its combustion products or from resulting gases:
This article doesn't contain dangerous substances or preparations intended to be released under normal or reasonably foreseeable conditions of use.

5.3. Advice for firefighters
Special protective equipment for firefighters:
In case of fire: Wear self-contained breathing apparatus.
Additional information:
Special danger of slipping by leaking/spilling product.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Personal precautions:
Provide adequate ventilation. Avoid generation of dust. Do not breathe dust. Avoid contact with skin, eyes and clothes. Remove persons to safety. Wear personal protection equipment. Wear breathing apparatus if exposed to vapours/dusts/aerosols. Special danger of slipping by leaking/spilling product.

6.2. Environmental precautions
Environmental measures:
No special environmental measures are necessary.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up:
Take up mechanically, placing in appropriate containers for disposal. Avoid generation of dust. Use approved industrial vacuum cleaner for removal.

6.4. Reference to other sections

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Advices on safe handling:
Avoid generation of dust. Provide for sufficient ventilation and punctiform suction at critical points. In case of insufficient ventilation, wear suitable respiratory equipment. Wear personal protection equipment. Open and handle container with care.
Precautions against fire and explosion:
No special fire protection measures are necessary.

7.2. Conditions for safe storage, including any incompatibilities
Requirements for storerooms and containers:
Keep container tightly closed in a cool, well-ventilated place.
Avoid generation of dust. Prevent wind dispersal during loading and unloading. Keep containers closed and

store packaged products so as to prevent accidental bursting.
Hints on joint storage:
Do not camp down with smell intensive materials. The material can adsorb smell-intensive material because of its big surface.
Storage class: 13

7.3. Specific end use(s)
not relevant

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Components with occupational exposure limits rsp. biological occupational exposure limits requiring monitoring:

Remarks:
limiting value of inert dust (alveolar content) : 3 mg/m³ TRGS 900
limiting value of inert dust (breathable content): 10 mg/m³

8.2. Exposure controls
Technical measures:
Avoid generation of dust. Provide for sufficient ventilation and punctiform suction at critical points. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means .
Respiratory protection: Respiratory protection necessary at/for: insufficient ventilation. dust formation, exceeding exposure limit values
Suitable respiratory protection apparatus: Filtering device (DIN EN 147). P 2
Hand protection: The glove material has to be impermeable and resistant to the product/the substance/the preparation. Due to missing tests no recommendation to the glove material can be given for the product/the preparation/the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
Suitable material: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
Eye protection: Tightly sealed safety glasses. Do not wear contact lenses.
Body protection: Wear suitable protective clothing.
Protect skin by using skin protective cream.
General protection and hygiene measures:
Wash hands before breaks and after work.
Wash contaminated clothing prior to re-use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties
Physical state: Granulate; Powder
Colour: grey; beige; light beige
Odour: characteristic

Important health, safety and environmental information:

		Unit		Method
pH:	6 - 11		**at °C** 20	*Wässrige Suspension*
Melting point / melting range:	> 450	**°C**		
Flammability:	*not applicable*			

Explosivity:	*not applicable*			
Density:		-	2,6	**g/cm³**
Bulk density:	500	-	1100	**kg/m³**

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability
Substance is, under normal conditions, chemically stable.

10.3. Possibility of hazardous reactions
not known.

10.4. Conditions to avoid
After contact with water: Special danger of slipping by leaking/spilling product.

10.5. Incompatible materials

10.6. Hazardous decomposition products
not relevant

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity:

CAS No.	Chemical name	LD50: oral	Unit	Species	LD50: dermal	Unit	Species	LC50: inhalat iv	Unit	Species
1302-78-9	Bentonite	> 2000	mg/kg	Rat.						

Irritant and corrosive effects:
Rabbit.
Irritant effect on the skin: Result: Not an irritant. OECD 404
Irritant effect on the eye: Result: Not an irritant. OECD 405
Sensitisation:
no data available, Bentonite is considered not to be a skin sensitizer based on experience in handling and low absorption through the skin.
Repeated dose toxicity:
No data available
CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):
Germ cell mutagenicity
Genotoxicity in vitro
In vitro gene mutation study in bacteria, Result: negative, OECD 471

In vitro chromosome aberration test, Result: negative, OECD 473

In vitro gene mutation study in mammalian cells, Result: negative, OECD 476

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

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

STOT - single exposure:
Remarks: No organ toxicity observed in acute tests.
Remarks: Based on available data, the classification criteria are not met.

Aspiration toxicity:
No aspiration toxicity classification

Additional information:
Repeated exposure may cause skin dryness or cracking.
General remarks:
Further information:
Specific symptoms in animal studies (likely route of exposure):

In case of ingestion:
No acute or long term effects were seen in animal studies following oral exposure.

In case of skin contact:
No acute effects were seen in an animal study following acute dermal exposure.
Bentonite acid leached is not a skin irritant

In case of inhalation:
No acute effects were seen in an animal study following acute inhalation exposure.

Bentonite acid leached contains crystalline silica, which is a known cause of silicosis, a progressive, sometimes fatal lung disease. In a 1997 monograph (Volume 68, “Silica, Some Silicates, Coal Dust and Para-aramid Fibrils”), the International Agency for Research on cancer (IARC) has classified “inhaled crystalline silica from occupational sources” in Group 1 as a substance “carcinogenic to humans”. In making the overall evaluation, the IARC Working Group noted that carcinogenicity in humans was not detected in all industrial circumstances studied. Crystalline silica has also been classified by the German MAK Commission as a human carcinogen (Category A1).

Although bentonite acid-leached contains quartz, an intratracheal study (Creutzenberg 2008) on the read across substance bentonite demonstrated significant differences in toxicity following administration of equivalent doses of quartz as either bentonite (15.2 mg of bentonite with 60% quartz) or reference quartz (10.5 mg of 87% quartz). The reference-quartz caused significant, self-perpetuating lung toxicity while bentonite demonstrated significantly less toxicity and partial recovery during the study period. The main effect of bentonite was slight fibrosis and inflammation of the lung. The study demonstrated that a simple bridging of toxicity data from quartz to bentonite acid-leached is not appropriate.

Occupational exposure to respirable dust should be monitored and controlled

SECTION 12: Ecological information

12.1. Toxicity
Aquatic toxicity:
Acute fish toxicity
LC50: 16 g/L , 96h, Oncorhynchus mykiss
Acute Daphnia toxicity
EC50: > 100 mg/l, 48h, Daphnia magna , OECD 202
Algae toxicity
EC50: > 100 mg/l , 72h, Scenedesmus subspicatus

Terrestrial toxicity:
No data available
Effects in sewage plants:
No data available

12.2. Persistence and degradability
Method:
Biodegradability:
The methods for determining biodegradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential
not relevant: Product/Substance is inorganic.

12.4. Mobility in soil
The product is: practically insoluble

12.5. Results of PBT and vPvB assessment
This substance does not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Recommendation:
The disposal of the product has to be carried out in accordance with the legal requirements. EWC waste codes are strictly industry-oriented, therefore waste classification has to be done by the waste producer.

Contaminated packaging:

Recommendation:
Non-contaminated packages may be recycled.

SECTION 14: Transport information

14.1. Land transport (ADR/RID)

14.2. Inland waterway craft (ADN/ADNR)

14.3. Sea transport (IMDG)

14.4. Air transport (ICAO-TI / IATA-DGR)

14.5. Additional information:
No dangerous good in sense of these transport regulations.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Water Hazard Class: n **Source:** S Selbsteinstufung
Technische Anleitung Luft (TA-Luft):

Ziffer:	**Gewichtsanteil in %:**
5.2.1	GW: 20 mg/m³

Other regulations (EU):
Chemical Safety Assessment
A hazard assessment has been conducted under the umbrella of the European Bentonite Association (EUBA) and the outcome was that bentonite is not a hazardous substances. Therefore, in absence of identified hazard, the substance is safe and presents no risk.

Training advice:
Workers must be informed of the presence of crystalline silica and trained in the proper use and handling of this product as required under applicable regulations.

SECTION 16: Other information

Further remarks:
The above information describes exclusively the safety requirements of the product and is based on our present -day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.
Further remarks:
sdb@Eaton.com