



SAFETY DATA SHEET

Revision date: 08-FEB-2022
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Version: 1



This document is based on the SDS provided by Eaton Technologies GmbH and has been adapted by Blue H₂O Filtration according to The Globally Harmonised System classification and Australian requirements.

Section 1: Identification: Product identifier and chemical identity

1.1 Product identifier

SIHA bentonite; SIHA Activ bentonite G; SIHA Puranit UF

1.2 Other means of identification

Bentontie.

1.3 Recommended use of the chemical and restrictions on use

Beverage production.

1.4 Details of manufacturer or importer

Manufacturer

Eaton Technologies GmbH
Langenlonsheim Branch
An den Nahewiesen 24
55450 Langenlonsheim
P: +49 6704 204-0
e: SDB@eaton.com

Importer

Blue H₂O Filtration
1/11-13 Wells Road
Oakleigh VIC 3166
P: 03 9564 7029
e: info@blueh2o.com.au

1.5 Emergency phone number

General emergency:	000
After hours emergency:	0401 446 119
Poisons information centre	1800 251 525 or 131 126
Chemcall Australia	1800 127 406

Section 2: Hazard(s) identification

2.1 Classification of the substance

GHS classification:	Not hazardous
Pictograms:	None
Signal word:	None
Hazard statements:	None
Precautionary statements:	None
Additional information:	Avoid inhalation and/or exceeding of occupational limit value. No risks worthy of mention.



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2.2 Label elements

P260: Do not breathe dust.

2.3 Other hazards

Skin contact: May cause irritation on prolonged contact.

Eye contact: May cause eye irritation upon direct contact.

Ingestion: Excessive ingestion could lead to intestinal discomfort (e.g. diarrhea, bloating, cramping, etc.).

Following inhalation: 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 are 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 and information on ingredients

3.1 Ingredients and composition

Product identifier	CAS/EC numbers	Substance name/classification	Concentration
SIHA Activ Bentonite G SIHA Puranit UF	1302-78-9/215-108-5	Bentonite, sodium; bentonite, calcium; montmorillonite; sodium- activated bentonite. Bentonite is a UVCB substance, sub-type 4.	100 %

Section 4: First aid measures

4.1 Description of first aid measures

Inhalation: Provide fresh air. In case of respiratory tract irritation, consult a physician.

Skin contact: After contact with skin, wash immediately with plenty of water and soap. Consult a physician.

If on clothing: Brush off in a well-ventilated area. Clean clothing when possible.

Eye contact: If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 10-15 minutes. Subsequently consult an ophthalmologist. Consult a physician.

Ingestion: Rinse mouth immediately and drink plenty of water. Consult a physician.

4.2 Symptoms caused by exposure

Typical symptoms are respiratory irritation, breathlessness, coughing, tightness and difficulty breathing.



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4.3 Medical attention and special treatment

Treat symptomatically. Consult a physician.

Section 5: Firefighting measures

5.1 Suitable extinguishing equipment

Water, carbon dioxide (CO₂), foam, extinguishing powder.

Unsuitable extinguishing media: High powder water jet.

5.2 Specific hazards

None.

5.3 Special protective equipment and precautions

In case of fire: Wear self-contained breathing apparatus.

Danger of slipping by leaked/spilled product.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Do not breathe dust. Use personal protection equipment. Avoid contact with skin, eyes and clothes. Wear breathing apparatus if exposed to vapours/dusts/aerosols. Special danger of slipping by leaking/spilling product.

6.2 Environmental precautions

No special precautions required.

6.3 Methods and materials for containment and cleaning up

Avoid dust formation. Collect mechanically with an approved industrial vacuum cleaner. Wash with plenty of water. Ventilate affected area.

Section 7: Handling and storage

7.1 Precautions for safe handling

Avoid dust formation. Use only in well-ventilated areas. Inhalation of dust may cause irritation of the respiratory system. Avoid contact with skin, eyes and clothes. In the case of insufficient ventilation, wear suitable respiratory equipment. Wear personal protection equipment. Handle and open container with care.

7.2 Conditions for safe storage

Keep container tightly closed in a cool, dry, dark and well-ventilated place. Avoid dust formation. Prevent wind dispersal during loading and unloading. Keep containers closed and store packaged products so as to prevent accidental bursting.



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Section 8: Exposure controls and personal protection

8.1 Exposure control measures

None.

8.2 Biological monitoring

None.

8.3 Control banding

None.

8.4 Engineering controls

Avoid dust formation. Provide adequate ventilation as well as local exhaust ventilation at critical locations. If local exhaust ventilation is not possible or insufficient, the entire working area must be ventilated by mechanical means.

8.5 Individual protection measures (PPE)

1. Eye and face protection

Safety glasses. Do not wear contact lenses.

2. Skin protection

Hand protection: The selection of suitable gloves not only depends on the material, but also on other quality characteristics. These may vary from manufacturer to manufacturer. The resistance of glove materials cannot be determined in advance and must therefore be checked prior to the application.

Suitable material: The glove material has to be impermeable and resistant to the product. No specific recommendation regarding the glove material can be given for the. Select the glove material based on consideration of the penetration times, rates of diffusion and degradation.

Breakthrough time: The exact break through time must be advised by the manufacturer of the protective gloves.

3. Respiratory protection

Respiratory protection necessary if insufficient ventilation. Suitable respiratory protection apparatus: P3/N95 mask.

4. Thermal hazards

None.

5. Additional information

Limiting value of inert dust (alveolar content): 3 mg/m³ TRGS 900

Limiting value of inert dust (breathable content): 10 mg/m³

Section 9: Physical and chemical properties

9.1 Appearance

Light beige/beige powder or granulate. Characteristic earthy odour.



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9.2 Physiochemical data

Parameter	Data	At °C	Method	Comment
Auto-ignition temperature	Not determined			
Decomposition temperature	Not determined			
Evaporation rate	Not determined			
Flammability	Not determined			
Flash point	Not determined			
Initial boiling point and range	Not determined			
Melting point	>450 °C			
Freezing point	Not determined			
Odour	Not determined			
Odour threshold	Not determined			
Partition coefficient: n-octanol/water	Not determined			
pH	6-11	20	Water suspension	
Density	2.6 g/cm ³			
Bulk density	500-1100 kg/m ³			
Solubility	Not determined			
Upper/lower flammability or explosive limits	Not determined			
Vapour density	Not determined			
Vapour pressure	Not determined			
Viscosity	Not determined			

9.3 Other information

Omitted data from Table 9.2 indicates that these are not relevant to the safe usage of the product.

Section 10: Stability and reactivity

10.1 Reactivity

No data available.

10.2 Chemical stability

Chemically stable under normal conditions of usage and storage.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

Avoid heat, humidity and poor ventilation. After contact with water danger of slippage by leaked/spilled product.

10.5 Incompatible materials

No data available.

10.6 Hazardous decomposition products

No data available.



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Section 11: Toxicological information

11.1 Toxicological information relevant to health hazard category

Parameter	Data/comment
Acute toxicity	LD ₅₀ oral: 2000 mg/kg (rat).
Skin corrosion/irritation	May cause irritation on prolonged contact. OECD 404.
Serious eye damage/irritation	May cause irritation on contact. OECD 405.
Respiratory or skin sensitisation	No data available. Bentonite is considered not to be a skin sensitizer based on experience in handling and low absorption through the skin.
Germ cell mutagenicity	In vitro gene mutation study in bacteria: negative, OECD 471 In vitro chromosome aberration test: negative, OECD 473 In vitro gene mutation study in mammalian cells: negative, OECD 476
Carcinogenicity	No data available.
Reproductive toxicity	No data available.
Specific target organ toxicity (STOT) – single exposure	No data available.
Specific target organ toxicity (STOT) – repeated exposure	No data available. No organ toxicity observed in acute tests.
Aspiration hazard	No data available.

11.2 Other information

Repeated dose toxicity (subacute, subchronic, chronic): No data available.

Other information: Repeated exposure may cause skin dryness or cracking.

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.



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Section 12: Ecological information

12.1 Ecotoxicity

Acute fish toxicity LC₅₀: 16 g/L , 96 h, *Oncorhynchus mykiss* (Rainbow trout)
Acute Daphnia toxicity EC₅₀ > 100 mg/l, 48 h, *Daphnia magna* , OECD 202
Algae toxicity EC₅₀ > 100 mg/l , 72 h, *Scenedesmus subspicatus*.

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available. Substance is inorganic.

12.4 Mobility in soil

No data available. Substance is practically insoluble.

12.5 Other adverse effects

No data available.

Section 13: Disposal considerations

13.1 Disposal methods

Dispose of unwanted material in accordance with local regulations.

13.2 Additional information

Uncontaminated packaging may be recycled.

Section 14: Transport information

14.1 UN number

No data available.

14.2 Shipping or technical name

No data available.

14.3 Transport hazard class

No data available.

14.4 Packing group number

No data available.

14.5 Environmental hazards for transport purposes

No data available.

14.6 Special precautions for user

No data available.



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14.7 Additional information

No data available.

14.8 Hazchem or emergency action code

No data available.

Section 15: Regulatory information

15.1 Safety, health and environmental regulations

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 substance. Therefore, in absence of an 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 relevant information

This information is based on our current knowledge. The information is intended to give you advice about the safe handling of the product(s) 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(s) with other products, or in the case of processing, the information on this safety data sheet may no longer be valid.