

## SAFETY DATA SHEET BENTONEX SB

Revision 09.04.2014  
supersedes all earlier versions

### 1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY

#### 1.1. Product identifier

Bentonex SB, Sodium Bentonite Powder.

REACH Registration Notes: Exempted in accordance with Annex V.7

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

Identified uses: Structural gellant for civil engineering applications; effluent treatment.

#### 1.3. Details of the supplier

RS Minerals Ltd, 23 Allerston Way, Guisborough, Cleveland TS14 6GA, United Kingdom  
info@rsminerals.co.uk

#### 1.4. Emergency telephone number

+ 44 (0)1287 631530

### 2. HAZARD IDENTIFICATION

#### 2.1. Classification of the substance or mixture

##### Classification (EC 1272/2008)

Physical and Chemical Hazards: Not classified.

Human health: Not classified.

Environment: Not classified.

Classification (67/548/EEC): Not classified.

##### Human health

This product does not meet the criteria for classification as hazardous as defined in the Regulation EC 1272/2008 and in Directive 67/548/EEC. Depending on the type of handling and use, airborne respirable crystalline silica may be generated. Prolonged and/or massive inhalation of respirable crystalline silica dust (particles up to 10 microns in size) may cause lung fibrosis, commonly referred to as silicosis. Principal symptoms of silicosis are cough and breathlessness. Occupational exposure to respirable crystalline silica dust should be monitored and controlled.

##### Environment

The product is not expected to be hazardous to the environment.

##### Physical and Chemical Hazards

This product is an inorganic substance and does not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH. This product should be handled with care to avoid dust generation.

## **2.2. Label elements**

Label In Accordance With (EC) No. 1272/2008

No pictogram required.

## **2.3. Other hazards**

Not Classified as PBT/vPvB by current EU criteria.

## **3. COMPOSITION / INFORMATION ON INGREDIENTS**

A hydrated aluminosilicate mineral with typical empirical formula:

$(Al, Fe_{0.67}Mg_{0.33})Si_4O_{10}(OH)_2Na,Ca_{0.33}$

Typical mineralogical composition: >95% Bentonite (CAS No. 1302-78-9); up to 2% sodium carbonate (CAS No. 497-19-8); up to 1% crystalline silica (CAS No. 14808-60-7).

Classification (EC 1272/2008): Not classified.

Classification (67/548/EEC): Not classified.

## **4. FIRST AID MEASURES**

### **4.1. Description of first aid measures**

#### **General information**

No acute and delayed symptoms and effects are observed.

#### **Inhalation**

Move into fresh air and keep at rest. Get medical attention if any discomfort continues.

#### **Ingestion**

Rinse mouth thoroughly. Get medical attention if any discomfort continues.

#### **Skin contact**

Wash skin with soap and water. Use suitable lotion to moisturise skin.

#### **Eye contact**

Do not rub eye. Rinse with copious quantities of water and seek medical attention if irritation persists.

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

General information

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

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

No specific first aid measures noted.

## **5. FIRE FIGHTING MEASURES**

### **5.1. Extinguishing media**

Extinguishing media

The product is non-combustible. No specific extinguishing media is needed.

## **5.2. Special hazards arising from the substance or mixture**

Specific hazards

This product is not combustible. Small amounts of carbon dioxide will be produced.

## **5.3. Advice for firefighters**

Special Fire Fighting Procedures: No specific fire-fighting protection is required. Use an extinguishing agent suitable for the surrounding fire.

## **6. ACCIDENTAL RELEASE MEASURES**

### **6.1. Personal precautions, protective equipment and emergency procedures**

Avoid airborne dust generation, wear personal protective equipment in compliance with national legislation.

### **6.2. Environmental precautions**

No known adverse environmental effects.

### **6.3. Methods and material for containment and cleaning up**

Scoop up spillages and place in a container. Avoid creating airborne dusts. Wear appropriate respiratory protection, safety glasses and overalls as a precaution. When used to absorb a hazardous substance, handle as per that substance.

### **6.4. Reference to other sections**

For personal protection, see section 8. For waste disposal, see section 13.

## **7. HANDLING AND STORAGE**

### **7.1. Precautions for safe 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. Do not to eat, drink and smoke in work areas; wash hands after use; remove contaminated clothing and protective equipment before entering eating areas.

### **7.2. Conditions for safe storage, including any incompatibilities**

Store in a dry, covered area. 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.

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **8.1 Control Parameters**

Workplace Exposure Limits: Respirable Dust = 4 mg/m<sup>3</sup>; Total Inhalable Dust = 10mg/m<sup>3</sup>  
Quartz: Workplace Exposure Limit = 0.1 mg/m<sup>3</sup>

## 8.2. Exposure Controls

### Engineering Measures

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, 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 soiled clothing.

### Respiratory Equipment

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

### Hand Protection

For prolonged or repeated skin contact use suitable protective gloves. PVC or rubber gloves are recommended.

### Eye Protection

Use eye protection. Goggles/face shield are recommended.

### Hygiene Measures

When using do not eat, drink or smoke. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Use appropriate skin cream to prevent drying of skin.

### Skin Protection

No specific requirement. Appropriate protection (e.g. protective clothing, barrier cream) is recommended for workers who suffer from dermatitis or sensitive skin.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Powdered solid
Colour:	Beige or yellowish
Odour:	Odourless
pH:	9 – 10
Bulk Density:	Approx. 850 Kg/m <sup>3</sup>
Solubility:	Insoluble in water
Flammability:	Not flammable

## 10. STABILITY AND REACTIVITY

### 10.1. Reactivity

No specific reactivity hazards associated with this product.

### 10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

### 10.3. Possibility of hazardous reactions

Not applicable.

#### **10.4. Conditions to avoid**

No particular incompatibility.

#### **10.5. Incompatible materials**

Materials To Avoid: Strong acids.

#### **10.6. Hazardous decomposition products**

None under normal conditions.

### **11. TOXICOLOGICAL INFORMATION**

#### **11.1. Information on toxicological effects**

##### **General information**

This product has low toxicity.

##### **Inhalation**

Silicosis of the lung may result from excessive inhalation of respirable particles (up to 10 microns in size) over an extended period.

##### **Ingestion**

No known toxicology due to accidental ingestion.

##### **Skin contact**

Prolonged contact may cause dryness of the skin.

##### **Eye contact**

Particles in the eyes may cause irritation and smarting.

### **12. ECOLOGICAL INFORMATION**

#### **Ecotoxicity**

This product is classified as environmentally non-hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

#### **12.1. Toxicity**

Acute Toxicity – Fish: Not toxic.

Acute Toxicity – Aquatic Invertebrates: Not toxic.

Acute Toxicity – Aquatic Plants: Not toxic.

#### **12.2. Persistence and degradability**

Degradability: The product is not biodegradable.

#### **12.3. Bioaccumulative potential**

Bioaccumulative potential: The product does not contain any substances expected to be bioaccumulating.

#### **12.4. Mobility in soil**

Mobility: This product is virtually insoluble in water.

### **12.5. Results of PBT and vPvB assessment**

Not Classified as PBT/vPvB by current EU criteria.

### **12.6. Other adverse effects**

None known.

## **13. DISPOSAL CONSIDERATIONS**

### **General information**

This mineral can be disposed of as a non-toxic/inactive material in approved landfill sites in accordance with local regulations.

### **13.1. Waste treatment methods**

Where possible, recycling is preferable to disposal. Dispose of in compliance with local regulations.

## **14. TRANSPORT INFORMATION**

### **General**

No special precautions. The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

### **14.1. UN number**

No information required.

### **14.2. UN proper shipping name**

No information required.

### **14.3. Transport hazard class(es)**

No information required.

### **14.4. Packing group**

No information required.

### **14.5. Environmental hazards**

Not an Environmentally Hazardous Substance / Marine Pollutant

### **14.6. Special precautions for user**

Not applicable.

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

No information required.

## **15. REGULATORY INFORMATION**

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

1. Health and Safety at Work Act 1974. The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments.
2. The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).
3. Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply.
4. REACH – Exempted in accordance with Annex V.7
5. Workplace Exposure Limits 2005 (EH40)

### **15.2. Chemical Safety Assessment**

No chemical safety assessment has been carried out.

## **16. OTHER INFORMATION**

**RS Minerals Ltd provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate handling of the product by a properly trained person. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.**

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**End of Safety Data Sheet**