



SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name BENTONITE CHIPS (ALL GRADES)
Synonyms BENTONITE • NATURAL SODIUM BENTONITE

1.2 Uses and uses advised against

Uses DRILLING FLUID ADDITIVE

1.3 Details of the supplier of the product

Supplier name MUDEX (PTY) LTD
Address 5 Coulson Way, Canning Vale, WA, 6155, AUSTRALIA
Telephone + 61 (08) 9390 4620
Email info@mudex.com.au
Website <http://www.mudex.com.au>

1.4 Emergency telephone numbers

Emergency +61 427 558 155

1.7 Details of alternative suppliers of the product

Supplier name MUDEX AFRICA
Phone: +27 73 639 3625
Emergency: +27 73 639 3625
mgoosen@mudex.com.au

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

2.2 GHS Label elements

No signal word, pictograms, hazard or precautionary statements have been allocated.

2.3 Other hazards

This product is a naturally occurring mineral containing a small quantity of quartz, crystalline silica. Prolonged and repeated exposure to high concentrations of respirable crystalline silica may lead to chronic lung disease such as silicosis. Due to quantity, composition, and nature of use, adverse health effects are not anticipated. Avoid creating dust.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
BENTONITE	1302-78-9	215-108-5	<=100%

Ingredient Notes The respirable fraction of free crystalline silica is < 1%.

4. FIRST AID MEASURES

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4.1 Description of first aid measures

Eye	If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.
Inhalation	If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.
Skin	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.
Ingestion	For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). Due to product form and application, ingestion is considered unlikely.
First aid facilities	Eye wash facilities and safety shower should be available.

4.2 Most important symptoms and effects, both acute and delayed

Repeated exposure to crystalline silica may result in lung fibrosis (silicosis). Principal symptoms of silicosis are coughing and breathlessness. Crystalline silica is classified as carcinogenic to humans (IARC Group 1).

4.3 Immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

5.2 Special hazards arising from the substance or mixture

Non flammable. May evolve toxic gases if strongly heated.

5.3 Advice for firefighters

Treat as per requirements for surrounding fires. Evacuate area and contact emergency services. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

5.4 Hazchem code

None allocated.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS.

6.2 Environmental precautions

Prevent product from entering drains and waterways.

6.3 Methods of cleaning up

Moisten with water to prevent a dust hazard and place in sealable containers for disposal.

6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well ventilated area, removed from incompatible substances and foodstuffs. Ensure packaging are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills.

7.3 Specific end uses

No information provided.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure standards

No exposure standards have been entered for this product.

Biological limits

No biological limit values have been entered for this product.

8.2 Exposure controls

Engineering controls Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended.

PPE

Eye / Face	Wear dust-proof goggles.
Hands	Wear PVC or rubber gloves.
Body	When using large quantities or where heavy contamination is likely, wear coveralls.
Respiratory	Where an inhalation risk exists, wear a Class P2 (particulate) / N95 respirator.



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	TAN OR BEIGE TO LIGHT GREY COLOURED TABLETS
Odour	ODOURLESS
Flammability	NON FLAMMABLE
Flash point	NOT RELEVANT
Boiling point	NOT AVAILABLE
Melting point	NOT AVAILABLE
Evaporation rate	NOT AVAILABLE
pH	7 to 10 (20% slurry)
Vapour density	NOT AVAILABLE
Relative density	2.38
Solubility (water)	SOLUBLE
Vapour pressure	NOT AVAILABLE
Upper explosion limit	NOT RELEVANT
Lower explosion limit	NOT RELEVANT
Partition coefficient	NOT AVAILABLE
Autoignition temperature	NOT AVAILABLE
Decomposition temperature	NOT AVAILABLE
Viscosity	NOT AVAILABLE
Explosive properties	NOT AVAILABLE
Oxidising properties	NOT AVAILABLE
Odour threshold	NOT AVAILABLE

10. STABILITY AND REACTIVITY

10.1 Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

10.2 Chemical stability

Stable under recommended conditions of storage.

10.3 Possibility of hazardous reactions

Polymerization is not expected to occur.

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10.4 Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

10.5 Incompatible materials

Incompatible with acids (e.g. nitric acid) and alkalis (e.g. sodium hydroxide).

10.6 Hazardous decomposition products

May evolve toxic gases if heated to decomposition.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	Based on available data, the classification criteria are not met.
Skin	Contact may result in irritation, redness and rash.
Eye	Contact may result in irritation, lacrimation, pain and redness.
Sensitisation	Not classified as causing skin or respiratory sensitisation.
Mutagenicity	Not classified as a mutagen.
Carcinogenicity	Not classified as a carcinogen. Crystalline silica is classified as carcinogenic to humans (IARC Group 1). However, adverse health effects are not anticipated given the non respirable nature of the silica quartz in this product (as supplied).
Reproductive	Not classified as a reproductive toxin.
STOT - single exposure	Over exposure may result in irritation of the nose and throat, with coughing.
STOT - repeated exposure	Not classified as causing organ damage from repeated exposure. Adverse health effects associated with silica, such as the development of silicosis (lung fibrosis), is not anticipated unless prolonged and repeated exposure to respirable silica quartz dust occurs.
Aspiration	This product is a solid and aspiration hazards are not expected to occur.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

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

12.2 Persistence and degradability

Not applicable for inorganic substances.

12.3 Bioaccumulative potential

Not applicable for inorganic substances.

12.4 Mobility in soil

No information provided.

12.5 Other adverse effects

The main component/s of this product are not anticipated to cause any adverse effects to plants or animals.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste disposal	Reuse where possible. No special precautions are normally required when handling this product.
Legislation	Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA

PRODUCT NAME BENTONITE CHIPS (ALL GRADES)

	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	None allocated.	None allocated.	None allocated.
14.2 Proper Shipping Name	None allocated.	None allocated.	None allocated.
14.3 Transport hazard class	None allocated.	None allocated.	None allocated.
14.4 Packing Group	None allocated.	None allocated.	None allocated.

14.5 Environmental hazards

No information provided.

14.6 Special precautions for user

Hazchem code	None allocated.
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15. REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Poison schedule	A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).
Classifications	Safe Work Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals (GHS Revision 7).
Inventory listings	AUSTRALIA: AIIC (Australian Inventory of Industrial Chemicals) All components are listed on AIIC, or are exempt.

16. OTHER INFORMATION

Additional information	<p>RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.</p> <p>EXPOSURE STANDARDS - TIME WEIGHTED AVERAGES: Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: Strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).</p> <p>PERSONAL PROTECTIVE EQUIPMENT GUIDELINES: The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.</p> <p>HEALTH EFFECTS FROM EXPOSURE: It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.</p>
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Abbreviations	ACGIH	American Conference of Governmental Industrial Hygienists
	CAS #	Chemical Abstract Service number - used to uniquely identify chemical compounds
	CNS	Central Nervous System
	EC No.	EC No - European Community Number
	EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
	GHS	Globally Harmonized System
	GTEPG	Group Text Emergency Procedure Guide
	IARC	International Agency for Research on Cancer
	LC50	Lethal Concentration, 50% / Median Lethal Concentration
	LD50	Lethal Dose, 50% / Median Lethal Dose
	mg/m ³	Milligrams per Cubic Metre
	OEL	Occupational Exposure Limit
	pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
	ppm	Parts Per Million
	STEL	Short-Term Exposure Limit
	STOT-RE	Specific target organ toxicity (repeated exposure)
	STOT-SE	Specific target organ toxicity (single exposure)
	SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
	SWA	Safe Work Australia
	TLV	Threshold Limit Value
	TWA	Time Weighted Average

Report status This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

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