



Material Safety Data Sheet

(In compliance with Directive 2001/058/EC and Regulation (EC) 1907/2006)

Section I. Identification of the Substance/Preparation and of the Company/Undertaking

Trade Name	HYBOND 210		
Product Name	Bentonite	CAS #	1302-78-9
Chemical Name	Hydrated Aluminino Silicate	Emergency Telephone	+34 (91) 360.69.00 (Office hours)
Supplier	TOLSA UK, Ltd. West Carr Road Retford Nottinghamshire DN22 7ZF (United Kingdom)	Protective Clothing  	
Manufacturer	TOLSA UK, Ltd. West Carr Road -Retford Nottinghamshire DN22 7ZF (United Kingdom)	Material Uses	Bonding clay.

Section II. Hazards Identification

Classification	These products are not dangerous preparations according to Directive 1999/45/EC. Constituents/compounds not listed in Annex VI of the Regulation (EC) 1982/2008
Potential Adverse Human Health Effects	This product may generate dust during handling and use. As any natural occurring mineral, bentonite may contain quartz (crystalline silica). Long term overexposure to crystalline silica dust may cause silicosis.
Potential Adverse Effects for Environment	No specific adverse effects are known
Target Organs	Eyes and Skin (irritation risk). Pulmonary System (irritation and chronic risk)
Protective Measures	In case of exposure to high level of airborne dust, it is recommended the use of safety glasses and approved dust respirator. Use in well ventilated areas. Avoid breathing dust and contact with eyes. It is recommended the use of latex or chemical resistant gloves in handling.

Section III. Composition/Information on Ingredients

Name	EINECS #	CAS #	EC Annex I/Annex VI*	% wt	Symbols	REACH Number	R-Phrases
Bentonite	215-108-5	1302-78-9	N/C	>98		Exempted	
Sodium Carbonate	207-838-8	497-19-8	N/C	<2	Xi	N/A	36

Asbestos free

N/C: Not Classified

Bentonite may contain crystalline silica (not listed in Annex I of Directive 67/548/EEC, not listed in Annex VI of Regulation (EC) 1272/2008*) in quantity up to 1 %.

Bentonite is not listed as dangerous substance in the Annex I of Directive 67/548/EEC, not listed in Annex VI of Regulation (EC) 1272/2008 as amended

Bentonite is an exemption from the obligation to register in compliance with Annex V of Regulation (EC) 1907/2006

Section IV. First Aid Measures

Emergency Medical Treatment No special instructions are required

Special Provisions No special requirements

FIRST AID

Eye Contact Irrigate with water
 Take care not to wash chemical from one eye to another
 If irritation persists consult a doctor

Skin Contact Remove contaminated clothing
 Wash with water

Inhalation In case of excessive inhalation, remove to fresh air and rest
 If recovery is not rapid obtain prompt medical attention

Ingestion Do not induce vomiting
 Give plenty of water to drink
 Beware of aspiration if vomiting occurs
 If feeling unwell seek medical attention immediately

SYMPTOMS AND EFFECTS

Eye Contact May cause irritation

Skin Contact None expected in normal conditions

Inhalation Mechanical Irritation

Ingestion None expected in normal conditions

Section V. Fire-Fighting Measures

General Advice	Non flammable, non explosive.
Extinguishing Media	<u>Suitable</u> : All extinguishing media can be used <u>Not to be used</u> : None known
Products of Combustion	Not applicable
Protection for firemen	No special requirements
Special risks	No hazardous releases in case of fire are expected

Section VI. Accidental Release Measures

Personal Precautions	Avoid dust formation. Avoid breathing dust and contact with eyes Use safety glasses and respiratory protection in case of high level airborne Wear respirator fitted with particulate filter (P2 or FFP2) and use eye protection such as goggles to BS EN 166 Dust Grade if dust generated Avoid skin contact and wear impervious gloves (e.g. rubber gloves)
Environmental Precautions	This product is based on natural clay and no special precautions are required Do not allow spill to enter drains and watercourses Clean up as part of good housekeeping practice
Spill Procedures	<u>Soil</u> : Scoop up or vacuum soil spillages, if appropriated, use gentle water spray to wet down. <u>Water</u> : Clean up any spillage.
Disposal	Place in a closed container prior to disposal. Can be landfilled in compliance with local regulations. Do not dry sweep, either damp down or use a vacuum system to clear Scoop up and place in container to await transfer Dispose of in accordance with local authority regulations

Section VII. Handling and Storage

Precautions in handling and storage	<p>Use good housekeeping practices to avoid generating airborne dust. Do not breathe dust. Avoid contact with eyes.</p> <p>Avoid skin contact</p> <p>Avoid eye contact</p> <p>Handle with care to avoid dust formation</p> <p>Ensure adequate ventilation</p> <p>Use local extraction equipment where possible</p> <p>Wear suitable protective clothing (see section 8)</p>
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HANDLING

Technical Measures	No special requirements
Fire/Explosion Controls	No special requirements
Advice for Safe Handling	Handle in accordance with good industrial hygiene and safety procedures
Incompatible Products	None expected

STORAGE

Suitable storage Circumstances	Store in a cool, dry, well ventilated area
Storage – away from	Store away from oxidising materials
Recommended packing materials	No special requirements

Section VIII. Exposure Controls/Personal Protection

Exposure Limit Values (for Respirable Crystalline silica)	<p>0.1mg/m³ 8hrTWA OEL Respirable silica</p> <p>4mg/m³ 8hrTWA OEL total respirable dust</p> <p>10mg/m³ 8hrTWA OEL Total inhalable dust</p>
<small>(mg/m³), (January, 2006)</small>	

Exposure Controls	<p>General ventilation</p> <p>Local exhaust ventilation is recommended to keep airborne levels below exposure limits.</p>
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Personal Protection

Respiratory: Use air-purifying dust respirator if airborne concentration levels are above exposure limits.

Hands: No special hands protection is required in normal conditions but the use of gloves is recommended.

Skin: No special skin protection is required in normal conditions. Wash skin if mechanical irritation is experienced.

Eyes: Use safety glasses with side shields if large amounts of product that could cause dust is handled.

Industrial Hygiene

Wash hands and other exposed areas with mild soap and water before eating, drinking, smoking and when leaving work. Keep the working area as clean and tidy as possible.

Environmental Exposure Controls

Do not allow product to reach sewage system or any watercourse.

Section IX. Physical and Chemical Properties

Appearance Off white free flowing powder

Odour Odourless

pH (10% in water) 9.5 ± 0.5

Boiling Point Not applicable

Flash Point Not applicable

Flammability Non-flammable

Explosive Properties None

Oxidising Properties None

Vapour pressure Not applicable

Relative Density 2.7 (Water = 1)

Solubility Insoluble in water. Insoluble in fats

Partition Coefficient Not applicable

Viscosity Not applicable

Vapour density Not applicable

Evaporation rate Not applicable

Melting/Sublimation Point Not available / Not applicable

Auto-Ignition Temperature Not applicable

Section X. Stability and Reactivity

Stability Data	This product is stable in normal conditions
Hazard reactions	None expected
Conditions to avoid	No special requirements
Materials to avoid (Incompatibility)	None known
Hazardous Decomposition	No hazardous decomposition or by-products are expected.

Section XI. Toxicological Information

Routes of Entry	Inhalation. Ingestion.
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EFFECTS OF ACUTE EXPOSURE

Eye contact	Mild irritant to eyes (according to the modified Kay & Calandra criteria)
Skin contact	Minor skin irritation may result from physical contact.
Sensitisation	No adverse effects are known
Ingestion	No adverse effects are known
Inhalation	Inhalation of high concentrations of dust may cause slight mechanical irritation
Additional Remarks	No additional remarks

EFFECTS OF CHRONIC OVEREXPOSURE

Main Effects	<p>As any natural occurring mineral, bentonite may contain quartz (crystalline silica). In 1997, IARC concluded that the respirable fraction of crystalline silica inhaled from occupational sources can cause lung cancer in humans. However, it pointed out that not all industrial circumstances, nor all crystalline silica types, were to be incriminated (IARC Monographs, Vol 68)</p> <p>In June 2003, the EU Scientific Committee on Occupational Exposure Limits (SCOEL) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis. Therefore preventing the onset of silicosis will also reduce the cancer risk...". (SCOEL SUM Doc 94-final, July 2003)</p>
Other Effects	No mutagenic, teratogenic or developmental toxicity effects are known
Additional Remarks	There is body of evidence supporting the fact that increased cancer risk would be limited to people already suffering from silicosis. According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits.

Section XII. Ecological Information

Ecotoxicity	Non toxic to aquatic life
Mobility	Immobile
Persistence and Degradability	Persistent in the environment
Bioaccumulative Potential	does not bioaccumulate
Other adverse effects	None known

Section XIII. Disposal Considerations

Methods of disposal	Dispose of in a safe manner in accordance with local/national regulations
Contaminated Packages	Dispose of in a safe manner in accordance with local/national regulations

Section XIV. Transport Information

Shipping Name	Not regulated
	<i>ADR</i> : Not classified
Transport Classification	<i>IMDG</i> : Not classified
	<i>ICAO/IATA</i> : Not classified
	<i>RID</i> : Not classified

Section XV. Regulatory Information and Pictograms

Trade Name	Hybond 210
EEC Labelling	Not classified
Symbol(s)	None
Contains	None
R-Phrases	None
S-Phrases	None
Annex I Number	Not applicable
EEC Number(s)	Not applicable

**Protective Clothing
(Pictograms)**

Section XVI. Other Information

R- Phrases Text (section III) R36: Irritating to eyes

Revision Number #1

Revision Date January, 2009

The information in this Material Safety Data Sheet should be provided to all who will use, handle, storage, transport or otherwise be exposed to these products. This information has been prepared for the guidance of plant engineering, operations, management and for people working with or handling these products. This information is believed to be reliable and updated at Revision Date, and represents the best information currently available and known by TOLSA. However, TOLSA makes no guarantee or warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. The information related herein is based in proper handling and anticipated uses and is for the material without chemical additions/alterations Users should make their own investigations to determinate the suitability of the information for their particular purposes.