

# Kentish Minerals

A division of Macromin Ltd

## Material Safety Data Sheet

1. Substance & Company Identification			
<b>Product name:</b>	KM Bentonite Clay	<b>Company:</b>	Kentish Minerals, 16-18, High Street Westerham, Kent TN16 1RF
<b>Applications :</b>	Drilling Fluids Construction Grouting		Tel: + 44 1959 564690 Fax: +44 1959 563722 Email: sales@mkm.co.uk Website: <a href="http://www.mkm.co.uk">www.mkm.co.uk</a>
2. Composition			
<b>Chemical Name</b>	Bentonite Clay	<b>Hazardous components</b>	Quartz
<b>Chemical Family</b>	Montmorillonite	<b>Concentration</b>	<5% total quartz.
<b>Formulae</b>	Aluminosilicate of sodium, calcium and magnesium.	<b>Quartz as dust &lt;7.1µ</b>	<0.5%
<b>CAS Number</b>	1302-78-9	<b>CAS Number</b>	14808-60-7
<b>EINECS Number</b>	215-288-5	<b>EINECS Number</b>	238-878-4
<b>R-Phrases number</b>	Xn R48/20	<b>R-Phrases number</b>	Xn R48/20
3. Hazards Identification			
<b>Possible Short term effects:</b>			
Skin Contact	May cause dryness.		
Eye Contact	Irritation and soreness due to dust particles.		
Inhalation	Irritation of nose and throat. Avoid exceeding WEL limit - see section 8.		
Ingestion	Mild gastric irritation.		
Labelling Classification	Xn – Harmful		
Risk and Safety Phrases	R48/20, S22, S51		
Precautions	Use in well ventilated areas, and do not breathe dust for prolonged periods – see Workplace Exposure Limits under section 8. Take care if wet as becomes slippery.		
4. First Aid Measures			
Skin Contact	Rinse thoroughly with cold water and seek medical attention if symptoms persist.		
Eye Contact	Rinse thoroughly with cold water and seek medical attention if symptoms persist.		
Inhalation	Remove person to fresh air, and if symptoms persist seek medical attention.		
Ingestion	Drink several glasses of water or milk. If large quantities are ingested seek medical attention.		
5. Fire Fighting Measures			
Non combustible	When extinguishing fires bear in mind product becomes slippery when wet.		
6. Accidental Release Measures			
Personal precautions	Do not breathe dust for prolonged periods - see section 8. Becomes very slippery when wet.		
Environmental risk	Non toxic.		
Cleaning up	Sweep -avoid dry sweeping as raises irritant dust, but do not wash with water as becomes very slippery when wet – mixing with damp sawdust is recommended or preferably vacuum up and dispose of as non toxic waste.		
7. Handling and Storage			
Handling	Avoid the creation of dust, and ensure adequate ventilation at point of use. See section 8.		
Storage	Store in clean dry environment.		
8. Exposure Control / Personal Protection			
Hand protection	Use barrier creams and rubber gloves as required.		
Skin protection	Normal work wear.		
Eye protection	Wear safety glasses.		

Respiratory protection	Use dust masks. Ensure adequate ventilation and dust control measures to maintain dust levels below WEL* limit.		
*Workplace Exposure Limits (WEL) according to COSHH E40/ 2005 amended Oct 2007: Dry bentonite is classed as a nuisance dust with an 8 hour TWA for amorphous dust inhalation of 6 mg/m <sup>3</sup> and 2.4 mg/m <sup>3</sup> for respirable dust (Respirable dust is that portion with a particle size <7.1µm.). Crystalline Silica present in small quantities in this product has a WEL of 0.1mg/m <sup>3</sup> for an 8 hour TWA period.			
<b>9. Physical and Chemical Properties</b>			
Appearance	Pale white, grey, yellow, or brown powder	Vapour pressure	N/A
Odour	Odourless	Flash Point	N/A
PH - 2% suspension	7 - 9.5		
S.G	2.5	Melting Point	N/A
Solubility	Forms suspension in water.		
Flammability	Non flammable	Boiling Point	N/A
Explosive properties	None		
<b>10. Stability and Reactivity</b>			
Conditions to avoid	Avoid generation of dust. Do not wet any spills.		
Materials to avoid	Oxidising agents		
Hazardous Decomposition products.	None		
<b>11. Toxicology Information</b>			
Ingestion	Orally non toxic. LD50 > 5000mg/kg Rat oral.		
Eye contact	Causes irritation due to physical abrasion by dust particles.		
Skin contact	Non toxic may cause skin dryness and chapping.		
Inhalation	Long term exposure to Bentonite dust in excess of the WEL limit may result in fibrosis of the lung tissue. The presence of respirable crystalline silica may lead to silicosis if the WEL is persistently exceeded over a long time.		
<b>12. Ecological information</b>			
This is a natural mineral with no known ecological problems associated with bentonite.			
<b>13. Disposal Considerations</b>			
Dispose of in accordance with local and national regulations using an approved disposal contractor.			
<b>14. Transport Information</b>			
There are no specific transport precautions required, as product is classified as not dangerous, but product should be kept dry as becomes slippery when wet and avoid dust creation.			
<b>15. Regulatory Information</b>			
European Inventory of New and Existing Chemical Substances – All the components of this product are listed on the EINECS inventory.			
EC Substance Classification – Directive 67/548/EEC Labelling Classification, Xn Risk and Safety Phrases R48/20 , S22			
COSHH regulations E40/2005 updated October 2007 apply in the UK.			
<b>16. Other information</b>			
EU Classes and Risk Phrases for Reference (See sections 2 and 3) Xn Harmful - substances which may cause health hazards less than toxic. It could refer to other types of risks e.g. to allergic reactions. R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation. S22 Do not breathe dust.			
Typical uses of this product are Civil engineering, Oil well drilling, Ceramics, Foundry applications, Land Fill barriers, Bore-hole sealing.			