NOHSC 16 Section

Material Safety Data Sheet

UNIMIN CLAY GROUP 1

Infosafe™ No. LPU5Q **Issue Date** February 2010 **Status** ISSUED by UNIMINAU BS: 1.9.46

Classified as hazardous according to criteria of NOHSC

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name UNIMIN CLAY GROUP 1

Product Code

Company Name Unimin Australia Limited (ABN 20 000 971 844)

Address 49-55 Woodlands Drive Braeside
Victoria 3195

Emergency Tel. 1800 638 556

Telephone/Fax Number Tel: (03) 9586 5400
Fax: (03) 9586 5413

Recommended Use Used in ceramic body and glazes; as a general purpose filler in paints, adhesives, rubber and paper; refractories; electrode coatings.

Other Names	**Name**	**Product Code**
	FX	
	BF	
	C	
	R	
	KCB	
	KCBR	
	K10	
	AIR SEPARATED FIRECLAY	
	Ball Clay FX	
	Ball Clay BF	
	Clay C3	
	Ball Clay R	
	Kaolin K10	

2. HAZARDS IDENTIFICATION

Hazard Classification HAZARDOUS SUBSTANCE.
NON-DANGEROUS GOODS.

Hazard classification according to the criteria of NOHSC.
Dangerous goods classification according to the Australia Dangerous Goods Code.

Risk Phrase(s) R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Safety Phrase(s) S22 Do not breathe dust.
S38 If insufficient ventilation, wear suitable respiratory equipment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Name	CAS	Proportion
	KAOLINITE	1318-74-7	20-50 %
	Other minerals	Mixture	<30 %
	Quartz (crystalline silica)	14808-60-7	20-50 %

Other Information The respirable fraction of free crystalline silica is 20-35%.

4. FIRST AID MEASURES

Inhalation If inhaled, remove affected person from contaminated area. Apply artificial respiration if not breathing. Seek medical attention.

Ingestion Do not induce vomiting. Wash out mouth with water. If symptoms develop seek medical attention.

Skin Wash affected area thoroughly with soap and water. Remove contaminated clothing and wash before reuse or discard. Seek medical attention.

Eye If in eyes, hold eyelids apart and flush the eyes continuously with running water. Continue flushing for several minutes until all contaminants are washed out completely. If symptoms develop and persist seek medical attention.

First Aid Facilities Eyewash and normal washroom facilities

Advice to Doctor Treat symptomatically.

Other Information For advice in an emergency, contact a Poisons Information Centre (Phone Australia 13 1126) or a doctor at once.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Use extinguishing media that are suitable for the surrounding combustible materials.
Hazards from Combustion Products	Under fire conditions this product may emit toxic and/or irritating fumes.
Specific Hazards	The product is not combustible, however the packaging may burn under fire conditions.
Precautions in connection with Fire	Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) operated in positive pressure mode and full protective clothing to prevent exposure to vapours or fumes. Water spray may be used to cool down heat-exposed containers
Unsuitable Extinguishing Media	Do not use water jets.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures	Increase ventilation. Evacuate all unprotected personnel. Wear sufficient respiratory protection and full protective clothing to prevent exposure. Sweep up material avoiding dust generation or dampen spilled material with water to avoid airborne dust, then transfer material to a suitable container. Wash surfaces well with soap and water. Seal all wastes in labelled plastic containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water authorities and EPA in accordance with local regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling	Use only in a well ventilated area. Keep containers sealed when not in use. Prevent the build up of dust in the work atmosphere. Avoid inhalation of dust, and skin or eye contact. Maintain high standards of personal hygiene i.e. Washing hands prior to eating, drinking, smoking or using toilet facilities.
Conditions for Safe Storage	Store in a cool, dry, well-ventilated area, out of direct sunlight and moisture. Store in labelled, corrosion-resistant containers. Keep containers tightly closed. Store away from bases, water and other incompatible materials. Have appropriate fire extinguishers available in and near the storage area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards	No exposure value assigned for this specific material by the National Occupational Health and Safety Commission (NOHSC), Australia. However, the available exposure limits for ingredients are listed below: National Occupational Health And Safety Commission (NOHSC), Australia Exposure Standards:

Substance TWA STEL NOTICES
ppm mg/m³ ppm mg/m³
Crystalline silica - 0.1 - - -
Dust - 10 - - -
TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.
STEL (Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

Biological Limit Values No biological limits allocated.

Engineering Controls This substance is harmful and should be used with a local exhaust ventilation system, drawing dust away from workers' breathing zone. Alternatively, a process enclosure system such as a fume cupboard should be employed. If the engineering controls are not sufficient to maintain concentrations of particulates below the exposure standards, suitable respiratory protection must be worn. If local exhaust ventilation is used, ensure sufficient air is replaced to compensate the air that has been removed. Refer to AS/NZS 2430.3.1:1997 : Classification of hazardous areas - Examples of area classification - General, for further information concerning ventilation requirements.

Respiratory Protection If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable dust/particulate filter should be used. Reference should be made to Australian/New Zealand Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye Protection Safety glasses with side shields or chemical goggles should be worn. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

Hand Protection Wear gloves of impervious material conforming to AS/NZS 2161: Occupational protective gloves - Selection, use and maintenance. Final choice of appropriate glove type will vary according to individual circumstances. This can include methods of handling, and engineering controls as determined by appropriate risk assessments.

Body Protection Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Industrial clothing should conform to the specifications detailed in AS/NZS 2919: Industrial clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Dark, off-white or white powder.

Odour Clay odour when moistened.

Melting Point Not available

Boiling Point Not applicable

Solubility in Water Insoluble. Forms colloidal suspensions in water, with strong thixotropic properties.

Specific Gravity 2.63-2.81

pH Value	4.5-8.1 (20% aqueous slurry)
Vapour Pressure	Not applicable
Vapour Density (Air=1)	Not applicable
Flash Point	Not available
Flammability	Non-combustible solid
Auto-Ignition Temperature	Not applicable
Flammable Limits - Lower	Not applicable
Flammable Limits - Upper	Not applicable

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions of storage and handling.
Conditions to Avoid	Not available
Incompatible Materials	Not available
Hazardous Decomposition Products	Under fire conditions this product may emit toxic and/or irritating fumes.
Hazardous Polymerization	Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicology Information	The product contains crystalline silica.
Inhalation	Harmful: danger of serious damage to health by prolonged exposure through inhalation. Inhalation of product dust may cause irritation of the nose, throat and respiratory system.
Ingestion	Ingestion of large amounts may irritate the gastric tract causing nausea and vomiting.
Skin	Skin contact may cause mechanical irritation resulting in redness and itching.
Eye	Eye contact may cause mechanical irritation. May result in mild abrasion.
Chronic Effects	Harmful: danger of serious damage to health by prolonged exposure through inhalation. , crystalline silica can cause silicosis or other lung diseases on prolonged exposure.

Carcinogenicity Product contains crystalline silica. Crystalline Silica (respirable size <= 7 µm) has been classified by the International Agency for Research on Cancer (IARC) as Carcinogenic to Humans (Group 1).

12. ECOLOGICAL INFORMATION

Ecotoxicity Not available

Persistence / Degradability Not available

Mobility Not available

Environment Protection Do not discharge this material into waterways, drains and sewers.

13. DISPOSAL CONSIDERATIONS

Disposal Considerations The disposal of the spilled or waste material must be done in accordance with applicable local and national regulations.

14. TRANSPORT INFORMATION

Transport Information Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

15. REGULATORY INFORMATION

Regulatory Information Classified as Hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC), Australia.
Not classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

Poisons Schedule Not Scheduled

Hazard Category Harmful

16. OTHER INFORMATION

Date of preparation or last revision of MSDS MSDS Reviewed: February 2010
MSDS Supersedes: February 2005

Contact Person/Point Emergency Advice: ACOHS ERS - 1800 638 556 (24 Hours)

PLEASE NOTE:
The information contained herein is based on data available to Unimin Australia Limited from both our own technical sources and from recognised published references and is believed to be both

accurate and reliable. Unimin Australia Limited has made no effort to censor nor to conceal deleterious aspects of this product. Since we cannot anticipate or control the many different conditions under which this information and our products may be used, each user should review these recommendations in the specific context of the intended application and confirm whether they are appropriate. It is therefore recommended that you undertake your own risk assessment in relation to your method of handling and proposed use of this product. Unimin Australia Limited accepts no liability whatsoever for damage or injury caused from the use of this information or of suggestions contained herein.

End of MSDS

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