ECKAPEN

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME
ECKAPEN

SYNONYMS
"Product Code: IMA 026", "Kaolin, China Clay"

PRODUCT NUMBERS
IMA 026

PRODUCT USE
Paper coating.

SUPPLIER

Company: Imerys Minerals Pty Ltd
Address:
PO Box 591
Burnie
TAS, 7320
AUS

Company: Imerys Minerals Pty Ltd
Address:
Glenelg Highway
Pitong via Linton
VIC, 3360
AUS
Telephone: +61 3 5344 7205
Fax: 03 5344 7308

Section 2 - HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE
NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. According to the Criteria of NOHSC, and the ADG Code.

POISONS SCHEDULE
None

RISK
None under normal operating conditions.

SAFETY
■ Do not breathe dust.

■ Avoid contact with skin.
■ Wear eye/face protection.
■ Use only in well ventilated areas.
■ Keep container in a well ventilated place.
■ In case of contact with eyes rinse with plenty of water and contact Doctor or Poisons Information Centre.

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Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
kaolin	1332-58-7	>98
sodium carbonate	497-19-8	<0.2^
silica crystalline - quartz	14808-60-7	<1^

Section 4 - FIRST AID MEASURES

SWALLOWED
- If swallowed do NOT induce vomiting.
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
- Observe the patient carefully.
- Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
- Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
- Seek medical advice.

EYE
■ If this product comes in contact with the eyes:
- Wash out immediately with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- If pain persists or recurs seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN
■ If skin or hair contact occurs:
- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

INHALED
- If dust is inhaled, remove from contaminated area.
- Encourage patient to blow nose to ensure clear passage of breathing.
- If irritation or discomfort persists seek medical attention.

NOTES TO PHYSICIAN
■ Long term exposure to high dust concentrations may cause changes in lung function (i.e. pneumoconiosis) caused by particles less than 0.5 micron penetrating and remaining in the lung. A prime symptom is breathlessness. Lung shadows show on X-ray.

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA
- There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

FIRE FIGHTING
■ Product is not combustible. No special firefighting procedures required.
Use fire fighting procedures suitable for surrounding area.

FIRE/EXPLOSION HAZARD
- Non combustible.
- Not considered a significant fire risk, however containers may burn.

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FIRE INCOMPATIBILITY
■ None known.

HAZCHEM: None

PERSONAL PROTECTION
Glasses:
Chemical goggles.
Gloves:
PVC chemical resistant type.
Respirator:
Type AX-P Filter of sufficient capacity

Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS
■ Slippery when spilt.
Clean up all spills immediately.
If exposure to workplace dust is not controlled, respiratory protection is required; wear SAA approved dust respirator.
Use dry clean up procedures and avoid generating dust.
Place in clean drum then flush area with water.

MAJOR SPILLS
■ Slippery when spilt.
Clear area of personnel and move upwind.
If exposure to workplace dust is not controlled, respiratory protection is required; wear SAA approved dust respirator.
Prevent, by any means available, spillage from entering drains or water courses.
Use dry clean up procedures and avoid generating dust.
Recover uncontaminated product in clean, dry, labelled containers.
Collect recoverable product into labelled containers for recycling.

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING
■ Avoid generating and breathing dust.
• Limit all unnecessary personal contact.
• Wear protective clothing when risk of exposure occurs.
• Use in a well-ventilated area.
• Avoid contact with incompatible materials.
• When handling, DO NOT eat, drink or smoke.
• Keep containers securely sealed when not in use.
• Avoid physical damage to containers.
• Always wash hands with soap and water after handling.
• Work clothes should be laundered separately.
• Use good occupational work practice.
• Observe manufacturer's storing and handling recommendations.
• Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

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SUITABLE CONTAINER
Multi ply paper bag or woven polypropylene bulk bag.
Check that all containers are clearly labelled and free from leaks.
Packing as recommended by manufacturer.

STORAGE INCOMPATIBILITY
■ No known incompatibility with normal range of industrial materials.

STORAGE REQUIREMENTS
• Keep dry.
• Store under cover.
• Protect containers against physical damage.
• Observe manufacturer's storing and handling recommendations.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

Source	Material	TWA mg/m³	Notes
Australia Exposure Standards	kaolin (Kaolin (a))	10	(see Chapter 14)
Australia Exposure Standards	kaolin (Silica - Amorphous Fumed silica (respirable dust))	2	(see Chapter 14)
Australia Exposure Standards	silica crystalline - quartz (Silica - Crystalline Quartz)	0.1	(see Chapter 14)
Australia Exposure Standards	silica crystalline - quartz (Silica - Amorphous Fumed silica (respirable dust))	2	(see Chapter 14)

The following materials had no OELs on our records
• sodium carbonate: CAS:497- 19- 8

MATERIAL DATA
ECKAPEN:
■ None assigned. Refer to individual constituents.

KAOLIN:
■ For kaolin:
Kaolin dust appears to have fibrogenic potential even in the absence of crystalline silica. Kaolinosis can exist as simple and complicated forms with the latter often associated with respiratory symptoms. Crystalline silica enhances the severity of the pneumoconiosis.
Animal exposed by inhalation to 10 mg/m3 titanium dioxide show no significant fibrosis, possibly reversible tissue reaction. The architecture of lung air spaces remains intact.
The concentration of dust, for application of respirable dust limits, is to be determined from the fraction that penetrates a separator whose size collection efficiency is described by a cumulative log-normal function with a median aerodynamic diameter of 4.0 µm (+-) 0.3 µm and with a geometric standard deviation of 1.5 µm (+-) 0.1 µm, i.e..generally less than 5 µm.
Because the margin of safety of the quartz TLV is not known with certainty and given the associated link between silicosis and lung cancer it is recommended that quartz concentrations be maintained as far below the TLV as prudent practices will allow.

PERSONAL PROTECTION

EYE
• Safety glasses with side shields; or as required,
• Chemical goggles.

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• Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].

HANDS/FEET
• Wear chemical protective gloves, eg. PVC.
• Wear safety footwear or safety gumboots, eg. Rubber.

OTHER
• Overalls.
• Eyewash unit.

RESPIRATOR

Protection Factor	Half- Face Respirator	Full- Face Respirator	Powered Air Respirator
10 x ES	AX P1 Air- line*	- -	AX PAPR- P1 -
50 x ES	Air- line**	AX P2	AX PAPR- P2
100 x ES	-	AX P3	-
		Air- line*	-
100+ x ES	-	Air- line**	AX PAPR- P3

* - Negative pressure demand ** - Continuous flow.

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required. For further information consult site specific CHEMWATCH data (if available), or your Occupational Health and Safety Advisor.

ENGINEERING CONTROLS
■ None required when handling small quantities.
OTHERWISE:.
Use in a well-ventilated area.
General exhaust is adequate under normal operating conditions. If risk of overexposure exists, wear SAA approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE
Odourless white lumps or pellets; insoluble but dispersible in water. When moistened darkens and has a `clay' odour. Sets to a mass when wet. Material is chemically very inert.

PHYSICAL PROPERTIES
Solid.
Does not mix with water.
Sinks in water.

Molecular Weight: Not Applicable
Melting Range (℃): 1770
Solubility in water (g/L): Immiscible
pH (1% solution): Not Applicable
Volatile Component (%vol): Not Applicable
Relative Vapour Density (air=1): Not Applicable

Boiling Range (℃): Not Ap plicable
Specific Gravity (water=1): 2.64
pH (as supplied): Not Applicable
Vapour Pressure (kPa): Not Applicable
Evaporation Rate: Not Applicable
Flash Point (℃): Not Applicable

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Lower Explosive Limit (%): Not Applicable
Upper Explosive Limit (%): Not Applicable
Autoignition Temp (℃): Not Applicable
Decomposition Temp (℃): Not Available
State: Divided solid
Viscosity: Not Available

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY
■ Product is considered stable and hazardous polymerisation will not occur.
For incompatible materials - refer to Section 7 - Handling and Storage.

Section 11 - TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED
■ Considered an unlikely route of entry in commercial/industrial environments.
Considered to be non toxic.

EYE
■ The dust may produce eye discomfort causing transient smarting, blinking.

SKIN
■ The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.
Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

INHALED
■ Not normally a hazard due to non-volatile nature of product.
Inhalation of dusts, generated by the material during the course of normal handling, may be damaging to the health of the individual.
Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled.
If prior damage to the circulatory or nervous systems has occurred or if kidney damage has been sustained, proper screenings should be conducted on individuals who may be exposed to further risk if handling and use of the material result
in excessive exposures.
Effects on lungs are significantly enhanced in the presence of respirable particles. Overexposure to respirable dust may produce wheezing, coughing and breathing difficulties leading to or symptomatic of impaired respiratory function.

CHRONIC HEALTH EFFECTS
■ Principal routes of exposure are by accidental skin and eye contact and inhalation of generated dusts.
Long term exposure to high dust concentrations may cause changes in lung function (i.e. pneumoconiosis) caused by particles less than 0.5 micron penetrating and remaining in the lung. A prime symptom is breathlessness. Lung shadows show on X-ray.
Chronic dust inhalation as experienced in mineral extraction has caused
Kaolinosis with heavy lung marking, emphysema, and nodular pneumoconiosis.

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TOXICITY AND IRRITATION
■ Not available. Refer to individual constituents.

KAOLIN:
■ No significant acute toxicological data identified in literature search.

CARCINOGEN

Silica, amorphous	International Agency for Research on Cancer (IARC) Carcinogens	Group	3

Section 12 - ECOLOGICAL INFORMATION

■ DO NOT discharge into sewer or waterways.
Refer to data for ingredients, which follows:

ECKAPEN:

KAOLIN:

Ecotoxicity

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
Eckapen		No data		
kaolin		No data		

Section 13 - DISPOSAL CONSIDERATIONS

■ Recycle wherever possible.
Bury residue in an authorised landfill.

Section 14 - TRANSPORTATION INFORMATION

HAZCHEM: None (ADG7)

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: ADG7, UN, IATA, IMDG

Section 15 - REGULATORY INFORMATION

POISONS SCHEDULE: None

REGULATIONS
Regulations for ingredients

kaolin (CAS: 1332-58-7) is found on the following regulatory lists;
"Australia Exposure Standards","Australia High Volume Industrial Chemical List (HVICL)","Australia Inventory of Chemical Substances (AICS)","IMO IBC Code Chapter 18: List of products to which the Code does not apply","OECD Representative List of High Production Volume (HPV) Chemicals"

No data for Eckapen (CW: 22-2737)

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Section 16 - OTHER INFORMATION

INGREDIENTS WITH MULTIPLE CAS NUMBERS

Ingredient Name	CAS
silica crystalline - quartz	14808- 60- 7, 122304- 48- 7, 122304- 49- 8, 12425- 26- 2, 1317- 79- 9, 70594- 95- 5, 87347- 84- 0

■ Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.
A list of reference resources used to assist the committee may be found at:
www.chemwatch.net/references.

■ The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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This is the end of the MSDS.