

Material Safety Data Sheet

1. IDENTIFICATION OF MATERIAL AND SUPPLIER

PRODUCT NAME: MK POWDER

Synonyms: None

Recommended Use: Detergent powder

Supplier: Minehan Agencies Pty Ltd

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Emergency telephone number: 0408 777 800 (24Hrs Australia)

2. HAZARDS IDENTIFICATION

This product is classified as:

Hazardous Substance according to criteria of the National Occupational Health and Safety Commission (NOHSC).

Dangerous Goods according to the Australian Dangerous Goods Code (ADG Code).

Approved Criteria Classification (Calculated).	CORROSIVE R34 Safety Phrases S2, S36/37/39
SUSDP Classification	Poison S5 (Sodium metasilicate pentahydrate)
ADG Classification	Class 8 (Corrosive Powder)
Un Number	3253

EMERGENCY OVERVIEW

COLOUR	Whitish powder
PHYSICAL DESCRIPTION	Powder
ODOUR	Faint
MAJOR HEALTH HAZARD	Harmful if swallowed, burns to skin, eye damage, Respiratory tract irritation.

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POTENTIAL HEALTH EFFECTS

Inhalation: Short term exposure to dust. Strong irritation may occur including difficulty breathing. **Long term Exposure.** Possible lung and respiratory tract damage, may trigger pre-existing respiratory complaints.

Skin Contact: Short term exposure to dust or concentrated solution. Burns, redness and irritation. **Long term exposure.** Permeant scarring. Prolonged exposure to a diluted form may cause irritation, redness and dermatitis.

Eye Contact: Short term exposure. Severe irritation, serious eye damage. **Long-term exposure.** Permanent damage to eyes including blindness.

Ingestion: Short term exposure. Burns to mouth, oesophagus and stomach. Headaches, nausea, and severe abdominal pain may result. **Long-term exposure.** Permanent Gastrointestinal damage.

Carcinogen Status

NOHSC	Not Classified
NTP	Not Classified
IARC	Not Classified

3. COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL ENTITY	CAS No	PROPORTION W/W %
Sodium metasilicate pentahydrate	10213-79-3	10-30%
Sodium tripolyphosphate	7758-29-4	10-30%
Soda Ash	497-19-8	10-30%
Sodium docecylbenzylsulphonate	25155-30-0	10-15%
Other ingredients determined not to be hazardous		to 100%

4. FIRST AID MEASURES

Poison Information Centres in each State capital city can provide additional assistance for Scheduled Poisons: Phone (Australia 13 1126).

Inhalation: Remove victim from exposure. Remove contaminated clothing and loosen remaining clothing. Perform artificial respiration if needed. Allow patient to assume most comfortable position and keep warm. Seek medical attention.

Skin Contact: Remove contaminated clothing. Wash contaminated skin for at least 15-20mins with of water, or until no evidence of the chemical remains (this product will feel slippery or soapy on the skin.). If swelling, redness, blistering, or irritation occurs seek medical advice. Wash clothing before re-use.

Eye Contact: Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids to be held open. If present, remove contact lenses. Seek medical attention. **Note to Physician.** Can cause corneal burns.

Ingestion: Immediately rinse mouth with water. Do NOT induce vomiting. Seek urgent medical attention.

Notes to Physician: Treat symptomatically. Suggest intubation BEFORE any emesis due to foaming properties of this product.

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5. FIRE FIGHTING MEASURES

Flash Point: Not a Flammable or Combustible material.

Fire and Explosion Hazard: Non-combustible material.

Specific Hazards: Corrosive Powder. Fine dust particles will cause respiratory irritation. Wet down powder before removal.

Fire Fighting: Move container from fire area if it can be done without risk. Do not scatter spilled material with high-pressure water streams. If powder has been dissolved in water dam for later disposal. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. **Suitable Extinguishing Media:** Not combustible, however, if material is involved in a major fire use water fog to keep drums cool. Use foam, CO₂ or dry chemical powder to extinguish surrounding fire.

Hazardous Decomposition in Products: On burning may emit fumes including carbon monoxide, carbon dioxide, and partially burned hydrocarbons. Fire fighters to wear self-contained breathing apparatus if risk of exposure to vapour or products of combustion.

Hazchem Code: 2X

6. ACCIDENTAL RELEASE MEASURES

Alkaline powder. Shovel up if possible without personal risk. Wear protective equipment to prevent personal injury (see section 8). **Small spills (< 5kg)** Shovel up and seal in properly labelled containers for disposal. Hose down area with large amounts of water. Caution, Slip Hazard. **Large spills (>5kg)** Wear a dust mask, wet down material with fine mist. Shovel up and seal in properly labelled containers for disposal. Neutralise residual material with a mild acid (citric or acetic). Hose down area with large amounts of water. Keep unnecessary people away, isolate hazard area and deny entry. If contamination of sewers or waterways has occurred, advise local emergency services.

7. HANDLING AND STORAGE

Store in a well-ventilated area. Store in a cool, dry place and out of direct sunlight. Store away from foodstuffs and strong acids. Store in original containers. Do not store in aluminium containers. Keep containers closed when not in use – check regularly for leaks. This material is a Scheduled Poison and a Class 8 Corrosive powder and must be stored, maintained and used in accordance with the relevant regulations. Handle using good industrial hygiene practices (see section 8 on personal protection).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits: No value has been assigned for this specific material by NOHSC. However a general exposure for dusts is recommended.

Ingredient	TWA	STEL	Notices
General	500ppm		

TWA – the Time-Weighted Average airborne concentrations over an eight hour working day, for a five day week over an entire working life.

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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 work day. According to current knowledge, these concentrations should neither impair the health of, nor cause undue discomfort to, nearly all workers.

Sk Notice – absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.

Sen Notice-Sensitiser. The substance can cause a specific immune response in some people. An affected individual may subsequently react to minute levels of that substance.

These exposure standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. Exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Biological Limit Value: No biological limit allocated.

Engineering Controls: Ensure ventilation is adequate to maintain air concentrations below Exposure Standards and prevent exposure to vapours, mists and fumes. Use in well ventilated area. Keep containers closed when not in use.

Personal Protection Equipment

Respirator Type (AS 1716): If inhalation risk exists, wear organic vapour respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

Eye Protection: Safety glasses with side shields or goggles should be worn as described in Australian Standard AS/NZS 1337 – Eye Protectors for Industrial Applications.

Glove Type: Impervious PVC or rubber gloves should be worn.

Clothing: Suitable protective clothing should be worn eg: cotton overalls buttoned at neck and wrist.

Work/Hygienic Practices: Avoid skin and eye contact. Always wash hands before smoking, eating, drinking or using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Powder		Water Solubility	Completely Soluble
Colour	Whitish		Vapour Pressure	Not applicable
Odour	Faint		Vapour Density	Not applicable
Boiling Point	Not applicable		Evaporation Rate	Not applicable
Melting Point	Not known		% Volatiles	Not applicable
Freezing Point	Not applicable		Flash Point	Not flammable
Bulk density	900Kg/m ³		Flammability Limits	Not applicable
Ph (10% soln)	>12		Ignition Temperature	Not applicable

10. STABILITY AND REACTIVITY

Reactivity: Stable at normal temperatures and pressure.

Conditions to Avoid: Avoid contact with incompatible materials.

Incompatibilities: Strong Oxidising Agents & Strong Acids

Explosive reactions may occur with strong oxidising agents.

Violent heat producing reactions may occur with strong acids.

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Hazardous Decomposition: Thermal decomposition products include, sulphur dioxide, carbon dioxide, carbon monoxide, and Nitrous oxides.

Polymerisation: Will not polymerise.

11. TOXICOLOGICAL INFORMATION

MK Powder

Local Effects: Strong irritation by inhalation, burns to skin, damage to eyes, harmful by ingestion.

Target Organs: Contact effects only, no substance specific systemic effects.

Classification of Hazardous Ingredients

Ingredients	R Phrases
Sodium metasilicate pentahydrate	R34 R37
Sodium dodecylbenzylsulphonate	R22 R36/38
Soda Ash	R36

Individual Ingredient Information

Sodium Metasilicate Pentahydrate

Irritation Data: 250mg/24H, skin human, severe; 250mg/24H, skin rabbit, severe; 250mg/24H, skin guinea pig, moderate.

Toxicity Data: LD50 oral rat, 1153mg/kg; LD50 oral mouse, 770mg/kg; LDLo oral dog 250mg/kg

Local Effects: Corrosive: inhalation, skin eye, ingestion

Acute Toxicity Level: Moderately Toxic by ingestion. Lowest published toxic dose, oral human, 1mg/kg (acute renal failure).

Target Organs: Eyes, Skin, and Respiratory System

Mutagenic Data: No information available

Reproduction Effects Data: TDLo oral rat male, 15mg/kg; TDLo subcutaneous rat male, 9766ug/kg.

Sodium Dodecylbenzylsulphonate

Irritation Data: Eye rabbit, 250ug/24H, severe; eye rabbit 1%, severe; Skin rabbit 20mg/24H moderate.

Toxicity Data: LD50 intravenous mouse, 105 mg/kg; LD50 oral mouse, 1330mg/kg; LD50 oral rat, 438mg/kg.

Local Effects: Irritant, skin, eyes and Respiratory System

Acute Toxicity Level: Toxic by ingestion

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Target Organs: Skin, eyes, Respiratory System

Mutagenic Data: No information available

Reproduction Effects Data: No information available

12. ECOLOGICAL INFORMATION

General Statement: Do not allow large quantities (>20kg) of this product to enter the waterways. Strong alkaline effect will be detrimental to aquatic life.

Ecotoxicity: The hazard of this product for the environment is the high Alkaline Salts content (pH effect). The effect of Alkaline Salts on an organism depends on the buffer capacity of the aquatic or terrestrial ecosystem. LC50 values of acute toxicity tests with aquatic organisms ranged between 33 and 189 mg/L.

Persistence and Degradability: No specific information available for this product

Mobility: Very mobile when in solution in the soil and very soluble in water. Dust transport in the air may be an issue in a large spill.

13. DISPOSAL CONSIDERATIONS

Refer to State/Territory Land Waste Management Authority for disposal, show this MSDS for their consideration. Empty containers not to be recycled or used for any other purpose. Dispose in accordance with local regulations.

14. TRANSPORTATION INFORMATION

UN No	3253
Proper Shipping Name	Corrosive Powder
ADG Code	Class 8
Sub Risk	No sub risk
Packing Group	III
Special Precautions	None
Hazchem Code	2X
EPG	8A1 & 6A6
Segregations	Yes

15. REGULATORY INFORMATION

SUSDP: Poison S5.

AICS: All of the constituents of this material are listed on the ACIS.

16. OTHER INFORMATION

Issue Date: May 2006

Reason(s) For Issue: Initial issue

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Labelling Details

First line of Label must read: CAUTION

Other statements to include

R34	Causes burns
S2	Keep out of reach of children.
S26	In case of contact with eye/s, do NOT rub eyes as this may scratch the cornea, rinse immediately with plenty of water and seek medical advice.
S36/37/39	Wear Suitable protective clothing, gloves and eye/face protection
S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label wherever possible).

Abbreviations & Acronyms

SUSPD: Standard for the Uniform Scheduling of Drugs and Poisons

ADG: Australian Code for the Transport of Dangerous Goods by Road and rail

N.O.S. Not Otherwise Specified

CAS No: Chemical Abstracts Service Registry Number

UN No: United Nations Number

R-Phrases: Risk Phrases

S-Phrases: Safety Phrases

HAZCHEM Code: Hazardous Chemical emergency action code

NOHSC: National Occupational Health and Safety Commission

IARC: International Agency for Research into Cancer

ACIS: Australian Inventory of Chemical Substances

NTP: National Toxicology Program (USA)

Literary references:

Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(41999)]

National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [NOHSC: 2011(2003)]

Exposure Standards for Atmospheric Contaminants in the Occupational Environment

Guidance Note [NOHSC: 3008(1995)] National Exposure Standards [NOHSC: 10005(1999)]

List of Designated Hazardous Substances [NOHSC: 10005(1999)]

Standard for the Uniform Scheduling of Drugs and Poison No. 17

The Australian Code for the Transport of Dangerous Goods by Road and Rail EDITION 6

Disclaimer

This MSDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product and in particular how to safely handle and use the product in the workplace.

Since Minehan Agencies Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace i.e. a risk analysis.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact Minehan Agencies Pty Ltd.