CLASSIFIED AS HAZARDOUS ACCORDING TO NOHSC CRITERIA

1. Identification of the substance/preparation and company

Product:

Sika 4A

Recommended use:

Quick setting admixture for Portland Cement Mortars.

Manufacturer/supplier information:

Manufacturer/supplier:	Sika Australia Pty Ltd
Street/postbox:	55 Elizabeth Street
Town/city and Post Code:	WETHERILL PARK NSW 2164
Country:	AUSTRALIA
Phone:	(02) 9725 1145
Fax:	(02) 9725 3330
General information	Operations Manager
Emergency information phone:	1800 033 111

2. Composition/information on ingredients

Chemical characterization:

Aqueous solution

Hazardous ingredients:

Ingredient	CAS No	Concentration
Potassium hydroxide	1310-58-3	1-10%
Sodium Aluminate	1302-42-7	1-10%
Non-hazardous ingredients	-	to 100%

3. Hazard identification

Hazard Category:

C Corrosive

Risk Phrase(s):

R35: Causes severe burns.

Safety Phrase(s):

S24/25: Avoid contact with skin and eyes.
S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

4. First-aid measures

Inhalation:

Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Skin contact:

If skin or hair contact occurs, immediately remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre or a Doctor; or for 15 minutes and transport to Doctor or Hospital.

Eye contact:

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a Doctor; or for at least 15 minutes and transport to Doctor or Hospital.

Ingestion:

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766). Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Seek medical advice.

Notes to physician:

Treat symptomatically and as for strongly alkaline corrosive material.

5. Fire-fighting measures

Specific hazards:

Non-combustible material.

Special protective precautions and equipment:

Not combustible, however following can cause evolution of hydrogen by dissolving aluminium, zinc, tin and lead. On burning may emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

Suitable extinguishing media:

Not combustible, however, if material is involved in a fire use water fog (or if unavailable fine water spray), foam, dry agent (carbon dioxide, dry chemical powder).

6. Accidental release measures

Small Spills:

Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours. Wipe up with absorbent (clean rag or paper towels). Collect and seal in properly labelled containers or drums for disposal.

Large spills:

Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. Neutralise contaminated area with weak acid (vinegar) or dilute 0.1M hydrochloric acid. If contamination of sewers or waterways has occurred advise local emergency services.

7. Handling and storage

Handling:

Avoid skin and eye contact.

Storage:

Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from incompatible materials described in Section 10. Store away from sources of heat or ignition. Keep containers closed when not in use - check regularly for leaks.

8. Exposure controls/personal protection

National occupational exposure limits:

No value assigned for this specific material by the NOHSC Australia.

Biological Limit Values:

As per the “National Model Regulations for the Control of Workplace Hazardous Substances [NOHSC: 1005 (1994)]” the ingredients in this material do not have a Biological Limit Allocated.

Engineering measures:

Natural ventilation should be adequate under normal use conditions. Atmospheric contamination is not

expected for envisaged use of this product.

Personal protection equipment:

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES.
Wear overalls, chemical goggles and impervious gloves. Due to variations in glove construction and local conditions, the user should make an assessment of the appropriate gloves to use. Wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

9. Physical and chemical properties

Appearance:

Physical state:	liquid
Colour:	pale straw coloured
Odour:	N Av

Data relevant to safety:

Solubility:	Miscible in water
Specific Gravity (20 °C):	approx 1.25
Relative Vapour Density (air=1):	N Av
Vapour Pressure (25 °C):	Less than 24 mm Hg
Flash Point (°C):	Not cumbustable
Flammability Limits (%):	Not cumbustable
Autoignition Temperature (°C):	N App
Melting Point/Range (°C):	N Av
Boiling Point/Range (°C):	above 100
pH:	13-13.5

(Typical values only - consult specification sheet)
N Av = Not available N App = Not applicable

10. Stability and reactivity

Chemical stability:

This material is thermally stable when stored and used as directed.

Conditions to avoid:

Elevated temperatures.

Incompatible Materials:

Strong acids, various metals. Reacts with ammonium salts evolving ammonia gas.

Hazardous decomposition products:

Oxides of carbon and nitrogen, smoke and other toxic fumes.

Hazardous reactions:

No information available.

11. Toxicological information

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Acute Effects:

Inhalation: A mist will irritate mucous membranes and respiratory tract.

Skin contact: Causes burns.

Eye contact: Risk of serious damage to eyes.

Ingestion: Burns mucous membranes, also poisonous.

Long Term Effects:

There have been no reports in the literature of health effects in workers arising from long term exposure to this substance (in use since 1920) and no comprehensive human studies have been conducted. No animal studies have been conducted for long term effects.

Acute toxicity / Chronic toxicity:

Potassium hydroxide animal toxicity
Intra peritoneal LD50 (mouse) = 40mg / kg
Oral lowest lethal dose (rabbit) = 500mg / kg

12. Ecological information

Avoid contaminating waterways.

Ecotoxicity:

No information available.

Persistence and degradability:

No information available.

Mobility:

No information available.

13. Disposal considerations

Refer to State/Territory Land Waste Management Authority.

14. Transport information

ADG/ADR/RID

UN No: 1719
Dangerous Goods Class: 8
Packing Group: II
Hazchem Code: 2R
Emergency Response Guide No: 8AI
Proper Shipping Name: CAUSTIC ALKALINE LIQUID, N.O.S. (contains SODIUM ALUMINATE and POTASSIUM HYDROXIDE)
Do not transfer to unlabelled non-approved Dangerous Goods Containers or containers made of or coated with aluminium, zinc, tin or lead. These metals will be dissolved by Sika®-4A liberating hydrogen gas.

IMDG

UN No: 1719
Dangerous Goods Class: 8
Packing Group: II
Proper Shipping Name: CAUSTIC ALKALINE LIQUID, N.O.S. (contains SODIUM ALUMINATE and POTASSIUM HYDROXIDE)

IATA

UN No: 1719
Dangerous Goods Class: 8
Packing Group: II
Proper Shipping Name: CAUSTIC ALKALINE LIQUID, N.O.S. (contains SODIUM ALUMINATE and POTASSIUM HYDROXIDE)

15. Regulatory information

Poisons Schedule (Aust):

This material is a Scheduled Poison S6 and must be stored, maintained and used in accordance with the relevant regulations.

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

16. Other information

Reason(s) For Issue: Revised

Material Safety Data Sheets are updated frequently. Please ensure that you have a current copy. MSDS may be obtained from the following website: www.sika.com.au

The information contained in this Safety Date Sheet corresponds to our level of knowledge at the time of publication. All warranties are excluded. Our most current General Sales Conditions shall apply. Please consult the Technical Data Sheet prior to any use and processing.