

Material Safety Data Sheet

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Infosafe No™ JXF1K Issue Date : July 2013 RE-ISSUED by THERMOF

Product Name **SODIUM HYDROXIDE 60% W/V**

Classified as hazardous

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name	SODIUM HYDROXIDE 60% W/V	
Product Code	548	
Company Name	Ajax Finechem (ABN 64 121 927 786)	
Address	17/21 Bay Road Taren Point NSW 2229 Australia	
Emergency Tel.	1800 638 556 (24 hr) Aust / (NZ): 0800 154 666	
Telephone/Fax Number	Tel: 1300 884 078	
Email	toms@ajaxfinechem.com	
Recommended Use	Chemicals manufacture; neutralising agent; pulp and paper, aluminium, detergent, and textile processing; vegetable oil refining; reclaiming rubber; etching and electroplating.	
Other Names	Name	Product Code
	SODIUM HYDROXIDE 1MOL	10742
	SODIUM HYDROXIDE 40% W/V	1719
	SODIUM HYDROXIDE 10% W/W	4400
	SODIUM HYDROXIDE 1MOL	1387
	SODIUM HYDROXIDE 60% W/V	A22
	SODIUM HYDROXIDE 60% W/V	A2220
	SODIUM HYDROXIDE 40% W/V	A23
	SODIUM HYDROXIDE 40% W/V	A2320
	SODIUM HYDROXIDE 40% W/V	A235
	Sodium Hydroxide 50% W/W Solution	1720
Other Information	NEW ZEALAND: Thermo Fisher Scientific New Zealand Limited 244 Bush Road, Albany, Auckland Phone: 09 980 6700 Fax: 09 980 6788 Emergency Advice (NZ): Phone 0800 154 666	

2. HAZARDS IDENTIFICATION

Hazard Classification	Classified as hazardous Australia: Classified as Hazardous according to criteria of National Occupational Health & Safety Commission, Australia (NOHSC). Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. New Zealand: Classified as Hazardous according to the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001, New Zealand. Classified as Dangerous Goods for transport according to the NZS 5433:2007 Transport of Dangerous Goods on Land. HSNO Classification: 6.1D - Substance that is acutely toxic if swallowed. 6.1E - Substance that is acutely toxic in contact with skin. 8.1A - Substance that is corrosive to metals. 8.2B - Substance that is corrosive to dermal tissue. 8.3A - Substance that is corrosive to ocular tissue. 9.1D - Substance that is slightly harmful in the aquatic environment. Hazard Statement Codes: H302 Harmful if swallowed. H313 May be harmful in contact with skin. H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage.
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H402 Harmful to aquatic life.

Precautionary Statement Codes- Prevention:

P102 Keep out of reach of children. - This statement applies only where the substance is available to the general public.
P103 Read label before use. - This statement applies only where the substance is available to the general public.
P104 Read Safety Data Sheet before use.
P260 Do not breathe mist, vapours or spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves, protective clothing, eye protection and face protection.

Precautionary Statement Codes- Response:

P101 If medical advice is needed, have product container or label at hand. - This statement applies only where the substance is available to the general public.
P390 Absorb spillage to prevent material damage.
INHALATION:
P304+P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P310 Immediately call a POISON CENTRE or doctor/physician.
INGESTION:
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P310 Immediately call a POISON CENTRE or doctor/physician.
SKIN:
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P310 Immediately call a POISON CENTRE or doctor/physician.
P363 Wash contaminated clothing before reuse.
EYES:
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTRE or doctor/physician.

Precautionary Statement Codes - Storage:

P405 Store locked up.
P406 Store in corrosive resistant container with a resistant inner liner.

Precautionary Statement Codes - Disposal:

P501 In the case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Regulations 2001. This may also include any method of disposal that must be avoided.

Risk Phrase(s)

Classified as hazardous

R35 Causes severe burns.

Safety Phrase(s)

S23(2) Do not breathe vapour.

S23(3) Do not breathe spray.

S24/25 Avoid contact with skin and eyes.

S26 In case of contact with eyes, 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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Name	CAS	Proportion	Hazard Symbol	Risk Phrase
	Sodium Hydroxide	1310-73-2	10-60 %		
	Water	7732-18-5	To 100%		

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4. FIRST AID MEASURES

Inhalation	If inhaled, remove from contaminated area. Apply artificial respiration if not breathing. Seek immediate medical attention.
Ingestion	Do NOT induce vomiting. Immediately wash out mouth and lips with copious amounts of water. Seek immediate medical attention.
Skin	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Seek immediate medical attention.
Eye	If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Seek immediate medical attention.
First Aid Facilities	Eye wash station, safety shower 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; New Zealand 0800 POISON / 0800 764 766) or a doctor at once.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Use appropriate fire extinguisher for surrounding environment.
Hazards from Combustion Products	Under fire conditions, it may decompose and produce corrosive and/or toxic fumes.
Specific Hazards	Non-combustible liquid, however reaction with metals will produce extremely flammable hydrogen gas.
Hazchem Code	2W
Precautions in connection with Fire	Fire-fighters should wear full protective clothing and self contained breathing apparatus (SCBA) operated in positive pressure mode. Water spray may be used to keep fire exposed containers cool.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures	Increase ventilation. Evacuate all unprotected personnel. Wear protective clothing and equipment to prevent exposure. If possible contain the spill. If necessary place inert absorbent onto material. Prevent run off into drains and waterways. Use clean non-sparking tools to collect the material and place into suitable, labelled containers. If contamination of sewers or waterways occurs inform the local water authorities and EPA in accordance with local regulations. Dispose of waste according to applicable local and national regulations.
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7. HANDLING AND STORAGE

Precautions for Safe Handling	Corrosive liquid. Attacks skin and eyes. May produce severe burns. Wear suitable protective clothing, gloves and eye/face protection when mixing and using. Use in designated areas with adequate ventilation. Avoid breathing in vapours, mist or fumes. Keep containers closed when not in use. Ensure a high level of personal hygiene is maintained when using this product, that is, always wash hands after handling, and before eating, drinking, smoking or using the toilet facilities.
Conditions for Safe Storage	Store in a cool, dry, well ventilated area away from oxidising agents, acids, aluminium, zinc, tin and ammonium salts. Keep containers closed when not being used.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards	No exposure standards have been established for this material by the Australian National Occupational Health & Safety Commission (NOHSC) or the Occupational Safety and Health Service (OSH) of the New Zealand Department of Labour. However, exposure standards for ingredients are stated below: Australian National Occupational Health And Safety Commission (NOHSC) Exposure Standards:
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Substance	TWA	STEL	Notices	
	ppm	mg/m ³	ppm	mg/m ³

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Sodium hydroxide - 2 - - (Peak Limitation)

New Zealand Occupational Safety and Health Service (OSH) Workplace Exposure Standards:

Substance	TWA		STEL		
	ppm	mg/m ³	ppm	mg/m ³	
Sodium hydroxide	-	2	-	-	(Ceiling)

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.

Peak Limitation: A ceiling concentration which should not be exceeded over a measurement period which should be as short as possible but not exceeding 15 minutes.

Ceiling: A concentration that should not be exceeded during any part of the working day.

No biological limit allocated.

Biological Limit Values

Engineering Controls

Provide sufficient ventilation to keep airborne levels below the exposure limits. Where natural ventilation is inadequate, and vapours or mists are generated, a local exhaust ventilation system, drawing vapours/mists away from workers' breathing zone, should be used.

Respiratory Protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapour/mist 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, goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances i.e. methods of handling or engineering controls and according to risk assessments undertaken. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

Hand Protection

Wear gloves of impervious material such as laminated film, PVC or nitrile gloves. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

Body Protection

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Water-white to slightly coloured liquid.
Melting Point	12°C
Boiling Point	140°C
Solubility in Water	Soluble
Specific Gravity	1.48-1.52
pH Value	14
Vapour Pressure	Not available
Vapour Density (Air=1)	>1
Evaporation Rate	<1 (n-Butyl acetate=1)
Viscosity	180 cps at 25°C

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Flash Point	Not applicable
Flammability	Non-combustible liquid.
Auto-Ignition Temperature	Not available
Flammable Limits - Lower	Not applicable
Flammable Limits - Upper	Not applicable

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions.
Incompatible Materials	Corrosive to aluminium, zinc and tin, liberating flammable hydrogen gas. Reacts violently with acids. Reacts with ammonium salts liberating ammonia gas. Absorbs carbon dioxide from air. Reacts exothermically on dilution with water.
Hazardous Polymerization	Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicology Information	No toxicity data are available for this specific product. The available data for the ingredients are as follows: For sodium hydroxide: LD50 (Intrapertioneal, Mouse): 40 mg/kg Skin (rabbit) severe irritation: 500 mg/24hr Eyes (rabbit) severe irritation: 1 mg/30 sec rinse Highly corrosive to any tissue with which it comes into contact. Produces burns, deep ulceration and gelatinous necrotic areas at the site of contact. Low systemic toxicity.
Inhalation	Inhalation of mists or vapours will result in severe respiratory irritation and possible harmful corrosive effects including lesions of the nasal septum, pulmonary edema, pneumonitis and emphysema.
Ingestion	Ingestion of this product may cause nausea, vomiting, abdominal pain and chemical burns to the mouth, throat and stomach.
Skin	Corrosive to skin. Skin contact will cause redness, severe burns with resultant tissue destruction.
Eye	Causes severe burns. Eye contact will cause stinging, blurring, tearing, severe pain and possible permanent corneal damage. Burns to the eye may cause blindness.
Chronic Effects	Chronic exposure by inhalation may lead to respiratory disorders, or it may aggravate existing respiratory disorders such as emphysema and chronic bronchitis. Prolonged or repeated skin contact may lead to dermatitis in some individuals.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Not available
Persistence / Degradability	Not available
Mobility	Not available
Bioaccumulative Potential	Not available
Environ. Protection	Do not discharge into drains, waterways or sewers.

13. DISPOSAL CONSIDERATIONS

Disposal Considerations	Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes including emptied containers are controlled wastes and should be disposed of in accordance with all federal, E.P.A., state and local regulations. Assure conformity with all applicable regulations.
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14. TRANSPORT INFORMATION

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Transport Information

Australia:

This material is classified as a Class 8 Corrosive Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. Dangerous goods of Class 8 (Corrosive) are incompatible in a placard load with any of the following:

- Class 1, Explosive
- Class 4.3, Dangerous When Wet Substance
- Class 5.1, Oxidising Agent
- Class 5.2, Organic Peroxide
- Class 6, Toxic and Infectious Substances, if the Class 6 dangerous goods are cyanides and the Class 8 dangerous goods are acids
- Class 7, Radioactive Substance

And are incompatible with food and food packaging in any quantity.

New Zealand:

This material is classified as a Class 8 Corrosive Substance according to NZS 5433:2007 Transport of Dangerous Goods on Land.

Must not be loaded in the same freight container or on the same vehicle with:

- Class 1, Explosives
- Class 5.1, Oxidising substances
- Class 5.2, Organic peroxides
- Class 7, Radioactive materials unless specifically exempted

And are incompatible with food and food packaging in any quantity.

Note 1: Cyanides (Class 6.1) must not be loaded in the same freight container or on the same vehicle with acids (Class 8).

Note 2: Strong acids must not be loaded in the same freight container or on the same vehicle with strong alkalis. Packing Group I and II acids and alkalis should be considered as strong.

Must not be loaded with in the same freight container; and on the same vehicle must be separated horizontally by at least 3 metres unless all but one are packed in separate freight containers with:

- Class 4.3, Dangerous when wet substances

Goods of packing group II or III may be loaded in the same freight container or on the same vehicle if transported in segregation devices with:

- Class 4.3, Dangerous when wet substances
- Class 5.1, Oxidising substances
- Class 5.2, Organic peroxides

And are incompatible with food and food packaging in any quantity.

U.N. Number

1824

Proper Shipping Name

SODIUM HYDROXIDE SOLUTION

DG Class

8

Hazchem Code

2W

Packaging Method

3.8.8RT8

Packing Group

II

EPG Number

8A1

IERG Number

37

15. REGULATORY INFORMATION**Regulatory Information**

Australia:

Classified as hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC), Australia.

Classified as a Scheduled Poison S6 according to the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

S6

Poisons Schedule**National and or International Regulatory Information**

New Zealand:

Classified as Hazardous according to the Hazardous Substances (Classification) Regulations 2001.

Group Standard:

Additives, Process Chemicals and Raw Materials (Corrosive) Group Standard 2006

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Hazard Category HSNO Approval Number: HSR002491.
All components of this product are listed on the New Zealand Inventory of Chemicals (NZIC).
Corrosive

AICS (Australia) All components of this product are listed on the Australian Inventory of Chemical Substances (AICS), or otherwise are in compliance with the NICNAS requirements.

16. OTHER INFORMATION

Date of preparation or last revision of MSDS MSDS Reviewed: November 2008
Supersedes: October 2003

Contact Person/Point For further information contact Tom Sadler on 1300 884 078 during business hours. In case of emergency call Australia 1800 638 556/ New Zealand 0800 154 666.

IMPORTANT ADVICE: This MSDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including its use in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact Ajax Finechem Pty Ltd. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.
...End Of MSDS...

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