SAFETY DATA SHEET

Section 1 - Identification of The Material and Supplier

Distributor
Axi-Kem Pty Ltd
54 Yambil Street
Griffith, NSW 2680
Phone: 02 6962 6455 (office hours)
Fax: 02 6962 6624
Email:info@axikem.com.au

Manufacturer
aiMix Chemicals Pty Ltd
52-54 Power St
St Marys, NSW 2760
Phone: 02 9623 3288 (office hours)
Fax: 02 9623 3655
Email: aimixchemicals@bigpond.com

Chemical nature: *Water solution of surfactants, solvents and other minor ingredients.*
Trade Name: **UNIDET**
Product Code: *1039A*
Product Use: *Laundry liquid for automatic dispensing.*
Creation Date: **January, 2016**
This version issued: **December, 2022** *and is valid for 5 years from this date.*
Poisons Information Centre: Phone 13 1126 from anywhere in Australia

Section 2 - Hazards Identification

Statement of Hazardous Nature

This product is classified as: Xi, Irritating. Hazardous according to the criteria of SWA.

Not a Dangerous Good according to Australian Dangerous Goods (ADG) Code, IATA or IMDG/IMSBC criteria.

SUSMP Classification: *None allocated.*
ADG Classification: *None allocated. Not a Dangerous Good according to Australian Dangerous Goods (ADG) Code, IATA or IMDG/IMSBC criteria.*
UN Number: *None allocated*



GHS Signal word: WARNING

HAZARD STATEMENT:

AUH066: Repeated exposure may cause skin dryness or cracking.
H320: Causes eye irritation.

PREVENTION

P102: Keep out of reach of children.
P262: Do not get in eyes, on skin, or on clothing.
P264: Wash contacted areas thoroughly after handling.
P281: Use personal protective equipment as required.

RESPONSE

P352: Wash with plenty of soap and water.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice.
P370+P378: Not combustible. Use extinguishing media suited to burning materials.

STORAGE

P404: Store in a closed container.

DISPOSAL

P501: If they can not be recycled, dispose of contents to an approved waste disposal plant and containers to landfill (see Section 13 of this SDS).

Emergency Overview

Physical Description & Colour*: clear, slightly viscous liquid.*
Odour: *Mild odour.*
Major Health Hazards: *2-butoxyethanol is a severe eye irritant. Results of skin irritation studies are conflicting; however, it is considered to be a mild to moderate skin irritant in test animals. Contact dermatitis has been reported in a few cases. It is well absorbed via the inhalational, oral and dermal routes. This product is an eye irritant, repeated exposure may cause skin dryness or cracking.*

Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc,%	TWA (mg/m^3)	STEL (mg/m^3)
2-Butoxyethanol	*111-76-2*	*8*	*96.9*	*242*
Non hazardous detergents	*secret*	*10-20*	*not set*	*not set*
Alkaline salts	*secret*	*5-10*	*not set*	*not set*
Other non hazardous ingredients	*secret*	*to 100*	*not set*	*not set*

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak "is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Section 4 - First Aid Measures

General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call.

Inhalation: *No first aid measures normally required. However, if inhalation has occurred, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice.*
Skin Contact: *Wash gently and thoroughly with water (use non-abrasive soap if necessary) for 5 minutes or until chemical is removed.*
Eye Contact: *Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15 minutes or until the product is removed, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Obtain medical attention immediately. Take special care if exposed person is wearing contact lenses.*
Ingestion: *If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poisons Information Centre, or call a doctor.*

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards*: The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. There is no risk of an explosion from this product under normal circumstances if it is involved in a fire.*
Only small quantities of decomposition products are expected from this product at temperatures normally achieved in a fire. This will only occur after heating to dryness.
Fire decomposition products from this product are not expected to be hazardous or harmful.
Extinguishing Media: *Not combustible. Use extinguishing media suited to burning materials.*
Fire Fighting: *If a significant quantity of this product is involved in a fire, call the fire brigade.*

Flash point:	*Does not burn.*
Upper Flammability Limit:	*Does not burn.*
Lower Flammability Limit:	*Does not burn.*
Autoignition temperature:	*Not applicable - does not burn.*
Flammability Class:	*Does not burn.*

Section 6 - Accidental Release Measures

Accidental release: *In the event of a major spill, prevent spillage from entering drains or water courses. Wear full protective clothing including eye/face protection. All skin areas should be covered. See below under Personal Protection regarding Australian Standards relating to personal protective equipment. Suitable materials for protective clothing include rubber, PVC. Eye/face protective equipment should comprise as a minimum, protective glasses and, preferably, goggles. If there is a significant chance that vapours or mists are likely to build up in the cleanup area, we recommend that you use a respirator. Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned below (section 8). Otherwise, not normally necessary. Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Recycle containers wherever possible after careful cleaning. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. This material may be suitable for approved landfill. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.*

Section 7 - Handling and Storage

Handling: *Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.*

Storage: *Make sure that containers of this product are kept tightly closed. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10. Some liquid preparations settle or separate on standing and may require stirring before use. Check packaging - there may be further storage instructions on the label.*

Section 8 - Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, *Protective Gloves:* **AS 2161**, *Occupational Protective Clothing: AS/NZS 4501 set 2008, Industrial Eye Protection:* **AS1336** *and* **AS/NZS 1337**, *Occupational Protective Footwear:* **AS/NZS2210**.

SWA Exposure Limits	**TWA (mg/m^3)**	**STEL (mg/m^3)**
2-Butoxyethanol	*96.9*	*242*

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

Ventilation: *This product should only be used in a well ventilated area. If natural ventilation is inadequate, use of a fan is suggested.*

Eye Protection: *Protective glasses or goggles should be worn when this product is being used. Failure to protect your eyes may cause them harm. Emergency eye wash facilities are also recommended in an area close to where this product is being used.*

Skin Protection: *You should avoid contact even with mild skin irritants. Therefore you should wear suitable impervious elbow-length gloves and facial protection when handling this product. See below for suitable material types.*

Protective Material Types: *We suggest that protective clothing be made from the following materials: rubber, PVC.*

Respirator: *Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above. Otherwise, not normally necessary.*

Eyebaths or eyewash stations and safety deluge showers should, if practical, be provided near to where this product is being handled commercially.

Section 9 - Physical and Chemical Properties:

Physical Description & colour:	*Clear, slightly viscous liquid.*
Odour:	*Mild odour.*
Boiling Point:	*Approximately 100°C at 100kPa.*
Freezing/Melting Point:	*Below 0°C.*
Volatiles:	*Water component.*
Vapour Pressure:	*2.37 kPa at 20°C (water vapour pressure).*
Vapour Density:	*As for water.*

Specific Gravity:	*No data.*
Water Solubility:	*Completely soluble in water.*
pH:	*About 7-8*
Volatility:	*No data.*
Odour Threshold:	*No data.*
Evaporation Rate:	*As for water.*
Coeff Oil/water Distribution:	*No data*
Autoignition temp:	*Not applicable - does not burn.*

Section 10 - Stability and Reactivity

Reactivity: *This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.*
Conditions to Avoid: *Keep containers tightly closed.*
Incompatibilities: *acids, strong oxidising agents.*
Fire Decomposition: *Only small quantities of decomposition products are expected from this product at temperatures normally achieved in a fire. This will only occur after heating to dryness. Combustion forms carbon dioxide, and if incomplete, carbon monoxide and possibly smoke. Water is also formed. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.*
Polymerisation: *This product will not undergo polymerisation reactions.*

Section 11 - Toxicological Information

Toxicity:
2-butoxyethanol is a severe eye irritant. Results of skin irritation studies are conflicting; however, it is considered to be a mild to moderate skin irritant in test animals. Contact dermatitis has been reported in a few cases. It is well absorbed via the inhalational, oral and dermal routes. Absorption studies in various species, including humans, have shown that 2-butoxyethanol is rapidly absorbed through the skin, including absorption from aqueous solutions. The respiratory uptake in volunteers in inhalational studies was approximately 57-78% of the inspired amount. Human studies indicate that dermal absorption of vapour is approximately 20% of the total vapour uptake. Following absorption, it is widely distributed throughout the body. The ingestion of large quantities of 2-butoxyethanol may result in coma, metabolic acidosis, shock and respiratory distress.
The main effect observed in both acute and repeated dose animal toxicity studies is haematotoxicity, with the principal haemolytic agent being BAA the major metabolite. Effects other than haemolysis which have been observed in repeated dose studies include changes to the liver, kidney, spleen and thymus, with these effects considered secondary to haemolysis as they are seen at levels at or above haematotoxic doses.
In fertility studies, minor changes in sperm concentration and the oestrous cycle were noted in a drinking water rat study.
2-butoxyethanol has tested negative in a wide variety of well conducted in vitro assays, including gene mutation, chromosomal aberration and DNA effect assays.
There is no data to hand indicating any particular target organs.

Classification of Hazardous Ingredients

Ingredient	*Risk Phrases*

No ingredient mentioned in the HSIS Database is present in this product at hazardous concentrations.

Potential Health Effects

Inhalation:
Short Term Exposure: *Available data indicates that this product is not harmful. However product may be mildly irritating, although unlikely to cause anything more than mild transient discomfort.*
Long Term Exposure: *No data for health effects associated with long term inhalation.*

Skin Contact:
Short Term Exposure: *Available data indicates that this product is not harmful. It should present no hazards in normal use. However product may be irritating, but is unlikely to cause anything more than mild transient discomfort.*
Long Term Exposure: *Repeated exposure may cause skin dryness or cracking.*

Eye Contact:
Short Term Exposure: *This product is an eye irritant. Symptoms may include stinging and reddening of eyes and watering which may become copious. Other symptoms may also become evident. If exposure is brief, symptoms*

should disappear once exposure has ceased. However, lengthy exposure or delayed treatment may cause permanent damage.

Long Term Exposure: *No data for health effects associated with long term eye exposure.*

Ingestion:

Short Term Exposure: *Significant oral exposure is considered to be unlikely. However, this product is an oral irritant. Symptoms may include burning sensation and reddening of skin in mouth and throat. Other symptoms may also become evident, but all should disappear once exposure has ceased.*

Long Term Exposure: *No data for health effects associated with long term ingestion.*

Carcinogen Status:

SWA: *No significant ingredient is classified as carcinogenic by SWA.*

NTP: *No significant ingredient is classified as carcinogenic by NTP.*

IARC: *2-butoxyethanol is Class 3 - unclassifiable as to carcinogenicity to humans.*

See the IARC website for further details. A web address has not been provided as addresses frequently change.

Section 12 - Ecological Information

Insufficient data to be sure of status.

Biodegradation studies indicate that 2-butoxyethanol will be readily degraded by micro-organisms present at sewage treatment plants. Ready biodegradability tests showed that it achieved a biodegradation rate of greater than 77% after 3 days and 100% after 7 days. A 20-day biochemical oxygen demand test and an OECD 28-day closed bottle test gave it degradation rates of 75% and 88% respectively. Literature data confirm these results.

Section 13 - Disposal Considerations

Disposal: *Containers should be emptied as completely as practical before disposal. If possible, recycle product and containers either in-house or send to recycle company. If this is not practical, send to a commercial waste disposal site.*

Section 14 - Transport Information

UN Number: *This product is not classified as a Dangerous Good by ADG, IATA or IMDG/IMSBC criteria. No special transport conditions are necessary unless required by other regulations.*

Section 15 - Regulatory Information

AICS: *All of the significant ingredients in this formulation are compliant with NICNAS regulations.*

The following ingredients: 2-Butoxyethanol (as ethylene glycol monoalkyl ether), Alkaline salts, are mentioned in the SUSMP.

Section 16 - Other Information

This SDS contains only safety-related information. For other data see product literature.

Acronyms:

ADG Code	*Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition)*
AICS	*Australian Inventory of Chemical Substances*
SWA	*Safe Work Australia, formerly ASCC and NOHSC*
CAS number	*Chemical Abstracts Service Registry Number*
Hazchem Code	*Emergency action code of numbers and letters that provide information to emergency services especially firefighters*
IARC	*International Agency for Research on Cancer*
NOS	*Not otherwise specified*
NTP	*National Toxicology Program (USA)*
R-Phrase	*Risk Phrase*
SUSMP	*Standard for the Uniform Scheduling of Medicines & Poisons*
UN Number	*United Nations Number*

THIS SDS SUMMARISES 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 MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS

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.

Please read all labels carefully before using product.

This SDS is prepared in accord with the SWA document "Preparation of Safety Data Sheets for Hazardous Chemicals - Code of Practice" (December 2011)
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http://www.kilford.com.au/ Phone (02)9251 4532