

SAFETY DATA SHEET

1. Product and Company Identification

Company Name:	Sierra Aust Pty Ltd 17 Delta Street, Geebung Queensland 4034 sales@sierrachem.com.au	Ph (07) 3216 5099 Fx (07) 3216 5199
Emergency Contact:	Sierra (07) 3216 5099	Poisons Information Centre 13 11 26

Product Name: **Supa Dish Ease Liquid**
Proper Shipping Name: CORROSIVE LIQUID, N.O.S. (contains sodium hydroxide)
Intended Use: Commercial Dishwashing Liquid
Chemical Nature: Alkaline solution

2. Hazards Identification

Hazardous Substance. Corrosive. Hazardous according to the criteria of SWA.
Dangerous Goods. According to the criteria of NOSHSC and the ADG code.

SUSMP Classification: S6

ADG Classification: Class 8: Corrosive Substances.

UN Number: 1719, CAUSTIC ALKALI LIQUID, N.O.S. (Potassium hydroxide, Sodium hydroxide).

GHS Classification: Metal Corrosion Category 1
Skin Corrosion/Irritation Category 1B
Serious Eye Damage Category 1

GHS Label Elements:

Signal Word:

Danger

Acute Toxicity Oral – Category 4
Skin corrosion – Category 1
Eye corrosion – Category 1
Acute aquatic toxicity – Category 2

GHS Hazard Phrases:

H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.
H401: Toxic to aquatic life.

PREVENTION

P102: Keep out of reach of children.
P260: Do not breathe fumes, mists, vapours or spray.
P264: Wash contacted areas thoroughly after handling.
P270: Do not eat, drink, or smoke when using this product.
P273: Avoid release to the environment.
P280: Wear protective gloves, protective clothing and eye or face protection.

RESPONSE

P301+P312: IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water.

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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 phone Australia 131 126 or doctor/physician.

P330: Rinse mouth.

P363: Wash contaminated clothing before reuse.

P391: Collect spillage.

STORAGE

P405: Store locked up.

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).

3. Composition / Information on Ingredients

Substance / Mixture: Mixture
Product Description: Commercial Dishwashing Liquid

Chemical Name	Cas Number	% In Product
Potassium Hydroxide	1310-58-3	<10
Sodium Hydroxide	1310-73-2	< 5
Alkaline salts	7320-34-5	10-15

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. Occupational exposure limits, if applicable are listed in section 8.

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: If irritation occurs, contact a Poisons Information Centre, or call a doctor. Remove source of contamination or move victim to fresh air. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. In severe cases, symptoms of pulmonary oedema can be delayed up to 48 hours after exposure.

Skin Contact: Seek urgent medical attention. Flush contaminated area with lukewarm, gently flowing water for at least 60 minutes, by the clock. DO NOT INTERRUPT FLUSHING. If necessary, keep emergency vehicle waiting (show paramedics this MSDS and take their advice). Under running water, remove contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Strongly basic ingredients tend to penetrate the skin and so need longer rinsing than other substances.

Eye Contact: Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for at least 60 minutes, by the clock, while holding the eyelid(s) open. Neutral saline solution may be used as soon as it is available. DO NOT INTERRUPT FLUSHING. If necessary, keep emergency vehicle waiting (show paramedics this MSDS and take their advice). Take care not to rinse contaminated water into the unaffected eye or onto face. Call a Poisons Information Centre or a doctor urgently. Take special care if exposed person is wearing contact lenses.

Ingestion: If swallowed, do NOT induce vomiting; rinse mouth thoroughly with water and contact a Poisons Information Centre. Urgent hospital treatment is likely to be needed. Give activated charcoal if instructed.

5. Fire Fighting Measures

Extinguishing Media: Water spray or fog.
Foam
Dry chemical powder.
BCF (where regulations permit)

Hazards arising from the mixture:

Fire Incompatibility: Reacts with aluminium/zinc producing flammable, explosive hydrogen gas.

Advice for Firefighters

Fire Fighting: Alert Fire Brigade and tell them location and nature of hazard.
Wear full body protective clothing with breathing apparatus.

Prevent by any means available, spillage from entering drains or water course.
 Use fire fighting procedures suitable for surrounding area.
Fire/Explosion Hazard: Non combustible.
 Not considered to be a significant fire risk.
 Expansion or decomposition on heating may lead to violent rupture of containers.
 Decomposes on heating and may produce toxic fumes of carbon monoxide.

6. Accidental Release Measures

Accidental release: In the event of a major spill, prevent spillage from entering drains or water courses. Evacuate the spill area and deny entry to unnecessary and unprotected personnel. Immediately call the Fire Brigade. Wear full protective chemically resistant clothing including eye/face protection, gauntlets and self contained breathing apparatus. See below under Personal Protection regarding Australian Standards relating to personal protective equipment. Suitable materials for protective clothing include rubber, Viton, Nitrile, butyl rubber, Barricade, neoprene, Teflon, polyethylene, PE/EVAL, Saranex, Responder. Eye/face protective equipment should comprise as a minimum, protective 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).

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. Because of the corrosiveness of this product, special personal care should be taken in any cleanup operation. 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. Contaminated area may be neutralised by washing with weak or dilute acid. Vinegar, citrus juice and most soft drinks may be suitable. 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.

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: This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport and storage of this schedule of poison. Store in a cool, well ventilated area. Check containers periodically for corrosion and leaks. Containers should be kept closed in order to minimise contamination. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10. If you keep more than 2500kg or L of Dangerous Goods of Packaging Group II, you may be required to license the premises or notify your Dangerous Goods authority. If you have any doubts, we suggest you contact your Dangerous Goods authority in order to clarify your obligations. Check packaging - there may be further storage instructions on the label.

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)
Potassium hydroxide	2	Peak
Sodium hydroxide	2	Peak

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: Your eyes must be completely protected from this product by splash resistant goggles with face shield. All surrounding skin areas must be covered. Emergency eye wash facilities must also be available in an area close to where this product is being used.

Skin Protection: Because of the dangerous nature of this product, make sure that all skin areas are completely covered by impermeable gloves, overalls, hair covering, apron and face shield. See below for suitable material types.

Protective Material Types: We suggest that protective clothing be made from the following materials: rubber, Viton, nitrile, butyl rubber, Barricade, neoprene, Teflon, polyethylene, PE/EVAL, Saranex, Responder.

Respirator: Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above.

Safety deluge showers should, if practical, be provided near to where this product is being handled commercially.

9. Physical and Chemical Properties

Physical State:	Liquid	Specific Gravity:	1.25
Colour:	clear/brown	Vapour Pressure:	Not Available
Odour:	typical	Volatiles:	Not Available
pH:	13.5	Vapour Density:	Not Available
Boiling Point:	100°C	Solubility:	100%
Flash Point:	n/a	Evaporation Rate:	<=Water

10. Stability and Reactivity

Reactivity: Most strong alkalis and bases react with inorganic and organic acids to form salts. They can also react with some metals liberating hydrogen gas. These reactions may be rapid and sometimes liberate much heat. They can also decompose many organic materials such as esters, in a reaction called hydrolysis.

Conditions to Avoid: This product should be kept in a cool place, preferably below 30°C. Keep containers tightly closed.

Incompatibilities: acids, zinc, tin, aluminium and their alloys, other substances reactive with extremely alkaline liquids.

Fire Decomposition: This product is likely to decompose only after heating to dryness, followed by further strong heating. May form hydrogen chloride gas, other compounds of chlorine.

Polymerisation: This product will not undergo polymerisation reactions.

11. Toxicological Information

Information on toxicological effects:

Acute toxicity	May be harmful if swallowed. Acute Oral LD50: Rat = approx. 1896 mg/kg (calculated, based on data from components)
Skin corrosion/irritation	Corrosion
Serious eye damage/irritation	Serious eye damage
Respiratory or skin sensitisation	No known significant effects or hazards.
Germ cell mutagenicity	No known significant effects or hazards.
Carcinogenicity	No known significant effects or hazards.
Reproductive toxicity	No known significant effects or hazards.
Specific target organ toxicity (STOT)- single exposure	No known significant effects or hazards.
Specific target organ toxicity (STOT)- repeated exposure	No known significant effects or hazards.
Aspiration hazard	No known significant effects or hazards.

Ingredient:

Sodium hydroxide

Potassium hydroxide

Alkaline sodium salts

Health effects:

Skin corrosion and serious eye damage.

Skin corrosion and serious eye damage. Harmful if swallowed.

Serious eye damage.

Inhalation:

Short Term Exposure: This product is an inhalation irritant. Symptoms may include headache, irritation of nose and throat and increased secretion of mucous in the nose and throat. Other symptoms may also become evident, but they should disappear after exposure has ceased if treatment is prompt.

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

Skin Contact:

Short Term Exposure: This product is very corrosive to the skin. Capable of causing severe burns with deep ulceration, and can penetrate to deeper layers of skin resulting in third degree burns. Corrosion will continue until product is removed or

neutralised. Severity depends on concentration and duration of exposure. Burns may not be immediately painful; the onset of pain may be minutes to hours.

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

Eye Contact:

Short Term Exposure: This product is very corrosive to eyes. It will quickly cause severe pain, and corrosion of the eye and surrounding facial tissues. Unless exposure is immediately treated, permanent blindness and facial scarring will occur.

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 very corrosive to the gastrointestinal tract. Capable of causing severe burns with deep ulceration, and can penetrate to deeper layers of skin resulting in third degree burns. Corrosion will continue until product is removed or neutralised. Severity depends on concentration and duration of exposure.

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

12. Ecological Information

Toxicity Prevent by any means available, spillage from entering drains or water courses. **DO NOT** discharge into sewer.

Persistence and Degradability

Ingredient

Sodium Hydroxide

Persistence: Water/Soil

Low

Persistence: Air

Low

Bioaccumulative Potential

Ingredient

Sodium Hydroxide

Bioaccumulation

Low (Log KOW= -3.8796)

Mobility in Soil

Ingredient

Sodium Hydroxide

Mobility

Low (KOC=14.3)

13 Disposal Considerations

The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport Information

Dangerous according to Australian Dangerous Goods (ADG) Code, IATA and IMDG/IMSB criteria.

UN Number: 1719, CAUSTIC ALKALI LIQUID, N.O.S. (Potassium hydroxide, Sodium hydroxide).

Hazchem Code: 2R

Special Provisions: 274

Limited quantities: ADG 7 specifies a Limited Quantity value of 1 L for this class of product.

Dangerous Goods Class: Class 8: Corrosive Substances.

Packaging Group: II

Packaging Method: P001, IBC02



Class 8 Corrosive Substances shall not be loaded in the same vehicle or packed in the same freight container with Classes 1 (Explosives), 4.3 (Dangerous When Wet Substances), 5.1 (Oxidising Agents), 5.2 (Organic Peroxides), 6 (Toxic Substances where the Toxic Substances are cyanides and the Corrosives are acids), 7 (Radioactive Substances), Foodstuffs and foodstuff empties. They may however be loaded in the same vehicle or packed in the same freight container with Classes 2.1 (Flammable Gases), 2.2 (Non-Flammable, Non-Toxic Gases), 2.3 (Poisonous Gases), 3 (Flammable liquids), 4.1 (Flammable Solids), 4.2

(Spontaneously Combustible Substances), 6 (Toxic Substances except where the Toxic Substances are cyanides and the Corrosives are acids) and 9 (Miscellaneous Dangerous Goods).

15. Regulatory Information

AICS: All of the significant ingredients in this formulation are compliant with NICNAS regulations.
The following ingredients: Potassium hydroxide, Sodium hydroxide, Alkaline salts, are mentioned in the SUSMP.

16. Other Information

Ingredients with multiple CAS numbers

Sodium Hydroxide CAS 12200-64-5, 1310-73-2

Every endeavor has been made to ensure that the information contained in this publication is reliable and offered in good faith. It is meant to describe the safety requirements of our products and should not be construed as guaranteeing specific properties. Customers are encouraged to conduct their own tests as end user suitability of the product for particular uses is beyond our control. The information is not intended as an inducement to bargain and no warranty expressed or implied is made as to its accuracy, reliability or completeness. Sierra (Aust) Pty Ltd accepts no liability for loss, injury or damage arising from reliance upon the information contained in this data sheet except in conjunction with the proper use of the product to which it refers. Due care should be taken that the use and disposal of this product is in compliance with appropriate Federal, State and Local Government regulations.

