

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: **Eco Gold**
Proper Shipping Name: CORROSIVE LIQUID, N.O.S. (contains sodium hydroxide)
Intended Use: Heavy Duty Degreaser
Chemical Nature: Alkaline solution of detergents

2. Hazards Identification

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

Poisons Schedule: S5

Risk Phrases: R34 Causes Burns, R41 Risk of serious damage to eyes.

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

GHS Label Elements:



Signal Word: **Danger**

GHS Hazard Phrases: H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage

Precautionary Statements:

Prevention: P260 Do not breathe dust/mist/vapour/spray/fumes/gas.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P234 Keep only in original container.

Response: P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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/doctor/physician/first aider.

Storage: P405 Store locked up.

Disposal: P501 Dispose of contents/container to authorized chemical landfill or if organic to high temperature incineration.

Safety Advice: S02 Keep locked up. S20 When using do not eat or drink. S23 Do not breathe gas/fumes/vapour/spray. S25 Avoid contact with eyes. S26 In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre. S28 After contact with skin, wash immediately with plenty of water. S36 Wear suitable protective clothing. S37 Wear suitable gloves. S39 Wear eye/face protection. S40 To clean the floor and all the objects contaminated by this material, use water. S45 In case of accident or if you feel unwell IMMEDIATELY contact a doctor or Poisons Information centre (show label if possible). S46 If swallowed seek medical advice immediately and show this container or label. S56 Dispose of this material and its container at hazardous or special waste collection point. S64 If swallowed, rinse mouth with water (only if the person is conscious).

Other Hazards: Cumulative effects may result following exposure.
Ingestion may produce health damage.

3. Composition / Information on Ingredients

Substance / Mixture: Mixture
Product Description: Cleaner / Degreaser

Chemical Name	Cas Number	% In Product
Sodium Hydroxide	1310-73-2	<5%
Sodium Metasilicate Anhydrous	6834-92-0	<10%

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

Description of necessary first aid measures

- Eye Contact:** Immediately hold eyelids apart and flush the eye continuously with running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
- Skin Contact:** Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water. (and soap if available). Seek medical attention in event of irritation.
- Inhalation:** If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag valve mask device or pocket mask as trained. Perform CPR if necessary. Transport to hospital or doctor.
- Ingestion:** For advice, contact Poisons Information Centre or a doctor at once. Urgent hospital treatment is likely to be needed. If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head down position if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse mouth, then provide liquid slowly and as much as casualty can comfortably drink. Transport to hospital or doctor without delay.

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

Personal precautions, protective equipment and emergency procedures

Minor Spills: Slippery when spilt.
Clean up all spills immediately.
Avoid breathing vapours and contact with skin and eyes.
Control personal contact with the substance, by using protective equipment.

Major Spills: Slippery when spilt.
Clear area of personnel and move upwind.
Alert Fire Brigade and tell them location and nature of hazard.
Wear full body protective clothing with breathing apparatus.

7. Handling and Storage

Precautions for safe handling:

Safe Handling: Avoid all personal contact, including inhalation.
Wear protective clothing when risk of exposure occurs.
Use in a well ventilated area.

Other Information: Store in original containers.
Keep containers securely sealed.
Store in a cool, dry, well-ventilated area.
Store away from incompatible materials and foodstuff containers.
Avoid contact with strong acids, acid chlorides, and acid anhydrides.
Avoid contact with copper, aluminium and their alloys.

8. Exposure Controls and Personal Protection

Control Parameters

Occupational exposure limits

Ingredient Name	CAS#	TWA (mg/m ³)	STEL (mg/m ³)
Sodium Hydroxide	1310-73-2	2	2

Emergency Limits

Ingredient Name	TEEL-1	TEEL-2	TEEL-3	IDLH
Sodium Metasilicate anhydrous	45 mg/m3	45 mg/m3	170 mg/m3	not available
Sodium Hydroxide	not available	not available	not available	10 mg/m3

Exposure Controls

Personal protection:



Eye & Face Protection: Chemical goggles whenever there is a danger of the material coming in contact with the eyes; goggles must be properly fitted. Full face shield (20 cm, 8 in minimum) may be required for supplementary but never for primary protection of eyes; these afford face protection. Alternatively a gas mask may replace splash goggles and face shields.

Hands & Feet: Elbow length PVC Gloves. When handling corrosive liquids, wear trousers or overalls outside of boots, to avoid spills from entering boots.

Other Protection: PVC apron. Eyewash unit.

9. Physical and Chemical Properties

Physical State:	Liquid	Specific Gravity:	1.06
Colour:	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:	See section 7
Chemical Stability:	The product is considered stable.
Possibility of hazardous reactions:	See section 7
Conditions to Avoid:	See section 7
Hazardous decomposition:	See section 5
Products	
Incompatible Materials:	See section 7

11. Toxicological Information

Information on toxicological effects

Inhaled	The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Inhaling corrosive bases may irritate the respiratory tract. Symptoms include cough, choking, pain and damage to the mucous membrane.
Ingestion	Ingestion of alkaline corrosives may produce burns around the mouth, ulcerations and swellings of the mucous membranes, profuse saliva production, with an inability to speak or swallow. Both the oesophagus and stomach may experience burning pain; vomiting and diarrhoea may follow.
Skin Contact	The material can produce chemical burns following direct contact with the skin. Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected. Skin contact with alkaline corrosives may produce severe pain and burns; brownish stains may develop.
Eye	Direct eye contact with corrosive bases can cause pain and burns. There may be swelling, epithelium destruction, clouding of the cornea and inflammation of the iris. Mild cases often resolve; severe cases can be prolonged with complications such as persistent swelling, scarring, permanent cloudiness, bulging of the eye, cataracts, eyelids glued to the eyeball and blindness.
Chronic	Repeated or prolonged exposure to corrosives may result in the erosion of teeth, inflammatory and ulcerative changes in the mouth and necrosis (rarely) of the jaw. Bronchial irritation, with cough, and frequent attacks of bronchial pneumonia may ensue. Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems.

Sierra Eco Gold	TOXICITY	IRRITATION
	Not Available	Not Available
sodium metasilicate, anhydrous	TOXICITY	IRRITATION
	dermal (rat) LD50: >5000 mg/kg ^[1]	Skin (human): 250 mg/24h SEVERE
	Oral (rat) LD50: 600 mg/kg ^[1]	Skin (rabbit): 250 mg/24h SEVERE
sodium hydroxide	TOXICITY	IRRITATION
	Oral (rabbit) LD50: 325 mg/kg ^[1]	Eye (rabbit): 0.05 mg/24h SEVERE
		Eye (rabbit): 1 mg/24h SEVERE
		Eye (rabbit): 1 mg/30s rinsed-SEVERE
		Skin (rabbit): 500 mg/24h SEVERE

**SODIUM
METASILICATE,
ANHYDROUS**

The material may cause severe skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin. Repeated exposures may produce severe ulceration.

Asthma like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non allergic condition known as reactive airways dysfunction syndrome which can occur following exposure to high levels of highly irritating compounds.

The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. The material may cause severe irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin. Repeated exposures may produce severe ulceration.

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

Label Required:



Land Transport (ADG):

Class or Division	8	Subsidiary Risk:	Not applicable
UN No.:	1760	Packing Group:	III
Special Provision:	223 274	Limited Quantity:	5 L
UN proper shipping name: CORROSIVE LIQUID N.O.S. (contains sodium hydroxide)			

Air Transport (ICAO-IATA /DGR):

ICAO/IATA Class	8	ICAO/IATA Subrisk:	Not applicable
UN Number:	1760	Packing Group:	III
Special provisions:	A3A803	ERG Code:	8L
Cargo Only Packing Instructions:	856	Cargo Only Max Qty / Pack:	60 L
Passenger & Cargo Packing	852	Passenger & Cargo Max Qty/Pk	5 L
Pass' & Cargo Ltd Qty Pck Inst'	Y841	Pass & Cargo Ltd Max Qty/Pck	1 L
UN Proper shipping name: CORROSIVE LIQUID N.O.S. (contains sodium hydroxide)			

Maritime Transport (IMDG / GGVSee)

IMDG Class	8	IMDG Subrisk:	Not applicable
UN Number:	1760	Packing Group:	III
EMS Number:	F- A, S- B	Special provisions:	223 274

Limited Quantities: 5 L
UN proper shipping name: CORROSIVE LIQUID N.O.S. (contains sodium hydroxide)

15. Regulatory Information

Sodium Metasilicate Anhydrous (CAS 6834-92-0)

Australia Hazardous Substances Information System – Consolidated Lists
Australia Inventory of Chemical Substances (AICS)

Sodium Hydroxide (1310-73-2)

Australia Hazardous Substances Information System – Consolidated Lists
Australia Inventory of Chemical Substances (AICS)
Australia Exposure Standards

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.