



Material Safety Data Sheet

SECTION 1 – IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name: LU 655 *Auto Dishwasher Liquid*
Recommended Use: Dishwasher Liquid Detergent / Concrete Tiles. Diluted mix.
Supplier Name: Luna Solutions Pty Ltd
Supplier Address: PO Box 229 Carlton Sth. Vic. 3053
Supplier Contact: David Penaluna
Telephone: 0418 396308
Fax: (03) 93542856
Emergency Contact: Mobile: 0418 396308

SECTION 2 – HAZARDS IDENTIFICATION

Hazard Classification: Hazardous according to the criteria of Worksafe Australia.
Hazard Category: C. Corrosive.
Xi. Irritant.
Risk Phrases: R35. Causes severe burns.
Safety Phrases: S2. Keep out of reach of children.
S26. In case of contact with eyes, rinse immediately with water.
S37. Wear suitable gloves.
S39. Wear eye protection.

Hazchem Code: 2X
ADG Classification: 8
UN Number: 1813
Packing Group: II
Poisons Schedule: S6

Emergency Overview

Physical Description & colour: Clear, liquid.
Odour: Mild odour.
Major Health Hazards: Causes severe burns to eyes. Skin irritant.

Potential Health Effects

Inhalation:

Short term exposure: Unlikely to be irritating to respiratory tract, unless present as an aerosol.

Long Term exposure: No data.

Skin Contact:

Short term exposure: Product will cause irritation.

Long Term exposure: Likely to cause contact dermatitis. Corrosive to skin.

Eye Contact:

Short term exposure: Severe eye irritant.

Long Term exposure: Can result in permanent injury.

Ingestion:

Can result in nausea, vomiting, abdominal pain, swelling of the larynx and subsequent suffocation, cardiovascular collapse and coma.

Carcinogen Status: **NOHSC:** *No significant ingredient is classified as carcinogenic by NOHSC.*

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

IARC: *No significant ingredient is classified as carcinogenic to humans.*

SECTION 3 – COMPOSITION & INFORMATION ON INGREDIENTS

| Ingredients | CAS No | Proportion | TWA (mg/m ³) | STEL (mg/m ³) |
|---------------------|-----------|------------|--------------------------|---------------------------|
| Potassium Hydroxide | 1310-58-3 | MED | not set | not set |
| Other | - | LOW | not set | not set |
| Water | 7732-18-5 | V HIGH | not set | not set |

KEY: Proportion, (wt %) - V HIGH >60, HIGH 30 - 60, MED 10 -29, LOW 1-9, V LOW <1

Note: The exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The 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 should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL.

SECTION 4 – FIRST AID MEASURES

NOTE: You should phone The Poisons Information Centre on 13 1126 if you feel that you may have been poisoned or irritated by this product. Have this MSDS with you when you call.

Inhalation: Remove victim to fresh air. Contact The Poisons Information Centre or a doctor.

Skin Contact: Wash affected area with water and apply moisturising cream to affected area. Always remove contaminated clothing and wash before re-use.

Eye Contact: With urgency, while holding eyelid(s) open, flush eye(s) with water until the product is removed or irritation has ceased. Obtain medical advice if irritation becomes painful or lasts more than several minutes.

Ingestion: With urgency, rinse mouth with water and drink several glasses of water. DO NOT induce vomiting. If vomiting occurs give further water to achieve effective dilution. Notify a physician and advise product is highly alkaline.

SECTION 5 – FIRE FIGHTING MEASURES

Fire and Explosion Hazards: There is no risk of an explosion from this product under normal circumstances if it is involved in a fire. This product is likely to decompose only after heating to dryness, followed by further strong heating.

Fire decomposition products from this product may be toxic if inhaled.

Extinguishing Media: Water, Foam or Dry Agent (Carbon dioxide, dry chemical powder).

Fire Fighting: If a significant quantity, (>200L) 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.

Auto ignition temperature: Not applicable.

Flammability Class: Does not burn.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Emergency Procedures: Minor spills (less than 2 litres) do not require special clean up measures or emergency procedures. In the event of a major spill, prevent spillage from entering drains or waterways. If in doubt call the EPA. As a minimum, wear gloves during clean up.

Methods & Materials for Containment & Clean Up: Stop leak if safe to do so, and contain spill.

Absorb onto sand or other suitable absorbent. If spill is large, bund area to stop material spreading to drains or waterways. Sweep up and collect product into labeled containers for disposal or salvage.

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. Launder protective clothing before re-use.

Advise laundry of nature of contamination when sending contaminated clothing to laundry.

SECTION 7 – HANDLING AND STORAGE

Precautions for Safe Handling: Do not mix with acids.

Conditions for Safe Storage: Store in the closed original container in a cool environment out of direct sunlight. Make sure that the product does not come into contact with substances listed under "Incompatible Materials" in Section 10.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Product Exposure Limits: TWA (mg/m³) Not available STEL (mg/m³) Not set
Ventilation: N/A – not expected to be present as an aerosol when used as intended.
Eye Protection: Safety goggles.
Skin Protection: Chemically resistant gloves and protective footwear.
Respirator: N/A – not expected to be present as an aerosol when used as intended.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical Description & Colour: Clear, liquid.
Odour: Odourless
pH (as supplied): 14.0 (highly alkaline)
Vapour Pressure: ~ 2 kPa at 20°C (water vapour pressure).
Boiling Point: ~ 100 °C
Freezing/Melting Point: ~ 0 °C.
Specific Gravity: 1.2 g/cm³.
Viscosity: ~ 100 cPs
Volatile organic compounds content: < 10 %
Percent volatile: > 80 %
Solubility: Miscible with water in all proportions.

Additional information

Flash point and method of detecting flash point: Not flammable.
Flame propagation or burning rate of solid materials: Not flammable.
Properties of both flammable and non-flammable materials that may initiate or uniquely contribute to the intensity of a fire (e.g. Class 4 or Class 5): Not flammable.
Reactions that release flammable gases or vapours: Evolves toxic gases on decomposition.
Fast or intensely burning characteristics: None expected. Not flammable.
Non-flammables that could contribute unusual hazards to a fire:
 Does not contain strong oxidants or reductants.
 Does not contain peroxides.
Ignition temperature: Not determined. Not flammable.

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability: Chemically stable.
Conditions to Avoid: Store in the closed original container in a cool place, out of direct sunlight.
Incompatible Material: Acidic compounds.
Hazardous Decomposition Products:
 This product is likely to decompose only when heated to dryness. Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke are likely to be produced when heated to dryness.
Hazardous Reactions: Reacts exothermally with acids.
Polymerisation: This product will NOT undergo polymerisation.

SECTION 11 – TOXICOLOGICAL INFORMATION**Health effects from the likely routes of exposure:**

- Skin:** Expected to cause irritation. Can result in severe burns.
Eye: Severe eye irritant. Can result in permanent injury.
Ingestion: May result in injury to the gastrointestinal tract.
Target Organs: There is no data to hand indicating any particular health effects on target organs.

SECTION 12 – ECOLOGICAL INFORMATION

Ingredients are biodegradable and will not accumulate in soil or water or cause long term problems.

SECTION 13 – DISPOSAL CONSIDERATIONS

Disposal methods & containers: Containers should be emptied as completely as practical before disposal. If possible, recycle containers either in-house or send to recycle company. If this is not practical, send to a commercial waste disposal site. It is expected that his product suitable for landfill. Check with Waste Disposal Authority before sending. DO NOT dispose into sewers or waterways.

SECTION 14 – TRANSPORT INFORMATION

- UN Number:** 1813
UN Shipping Name: Caustic potash solution.
EPG: 8 A1
Packing Group: II
Special Precautions for user: Wear gloves when handling.
Hazchem code: 2X
ADG Code: 8

SECTION 15 – REGULATORY INFORMATION

All of the significant ingredients in this formulation are to be found in the AICS Database.

SECTION 16 – OTHER INFORMATION

This MSDS contains only safety-related information. For other data, refer to product literature.

Date of preparation or last revision of the MSDS: 2nd February, 2013.

THIS MSDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS MSDS 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.