

# BRACTON CHEMICALS

A Division of Tesuco®

## SAFETY DATA SHEET

### 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

#### 1.1 Product identifier

**Product name** DESTAIN  
**Synonyms** ECOWASH DESTAIN

#### 1.2 Uses and uses advised against

**Uses** DEGREASER • DESTAINER • DISHWASHING DETERGENT  
Water based alkaline detergent concentrate for dishwashing.

#### 1.3 Details of the supplier of the product

**Supplier name** BRACTON CHEMICALS  
**Address** 12/110-120 Silverwater Rd, Silverwater, NSW, 2128, AUSTRALIA  
**Telephone** 02 9938 1800  
**Email** [office@bractonchemicals.au](mailto:office@bractonchemicals.au)

#### 1.4 Emergency telephone numbers

**Emergency** 02 9938 1800

### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

##### Physical Hazards

Corrosive to Metals: Category 1

##### Health Hazards

Acute Toxicity: Oral: Category 4  
Skin Corrosion/Irritation: Category 1A  
Serious Eye Damage / Eye Irritation: Category 1  
Contact with acids liberates toxic gas.

##### Environmental Hazards

Aquatic Toxicity (Acute): Category 3

#### 2.2 GHS Label elements

**Signal word** DANGER

##### Pictograms



##### Hazard statements

AUH031 Contact with acids liberates toxic gas.  
H290 May be corrosive to metals.  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H318 Causes serious eye damage.  
H402 Harmful to aquatic life.

**PRODUCT NAME DESTAIN****Prevention statements**

|      |  |
|------|--|
| P234 | Keep only in original packaging.   |
| P260 | Do not breathe dust/fume/gas/mist/vapours/spray.                           |
| P264 | Wash 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/eye protection/face protection. |

**Response statements**

|                    |  |
|--------------------|--|
| 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.                              |
| P304 + P340        | IF INHALED: Remove person to fresh air and keep 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 or doctor/physician.  |
| P321               | Specific treatment is advised - see first aid instructions.  |
| P363               | Wash contaminated clothing before reuse.   |
| P390               | Absorb spillage to prevent material damage.  |

**Storage statements**

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

**Disposal statements**

|      |  |
|------|--|
| P501 | Dispose of contents/container in accordance with relevant regulations. |
|------|--|

**2.3 Other hazards**

No information provided.

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**3. COMPOSITION/ INFORMATION ON INGREDIENTS**

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**3.1 Substances / Mixtures**

| Ingredient                | CAS Number    | EC Number     | Content   |
|---------------------------|---------------|---------------|-----------|
| POTASSIUM HYDROXIDE       | 1310-58-3     | 215-181-3     | 20 to 30% |
| SODIUM HYPOCHLORITE       | 7681-52-9     | 231-668-3     | 10 to 30% |
| SODIUM SILICATE           | 1344-09-8     | 215-687-4     | 1 to 10%  |
| WATER                     | 7732-18-5     | 231-791-2     | Remainder |
| NON HAZARDOUS INGREDIENTS | Not Available | Not Available | 1 to 5%   |

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**4. FIRST AID MEASURES**

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**4.1 Description of first aid measures**

|                             |  |
|-----------------------------|--|
| <b>Eye</b>                  | If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.   |
| <b>Inhalation</b>           | If inhaled, remove from contaminated area. To protect rescuer, use a Full-face Type B (Inorganic and acid gas) respirator or an Air-line respirator (in poorly ventilated areas). Apply artificial respiration if not breathing. |
| <b>Skin</b>                 | If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.                         |
| <b>Ingestion</b>            | For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting.   |
| <b>First aid facilities</b> | Eye wash facilities and safety shower should be available.   |

**4.2 Most important symptoms and effects, both acute and delayed**

Causes severe skin burns and eye damage.

**4.3 Immediate medical attention and special treatment needed**

Treatment is symptomatic. Ingestion of hypochlorites releases hypochlorous acid which is irritating to the mucous membranes and skin but has low systemic toxicity. Buffer the acid by administering antacids.

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**5. FIRE FIGHTING MEASURES**

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## PRODUCT NAME DESTAIN

### 5.1 Extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

### 5.2 Special hazards arising from the substance or mixture

Non flammable. May evolve toxic gases (chlorine) when heated to decomposition.

### 5.3 Advice for firefighters

Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

### 5.4 Hazchem code

2X  
2 Fine Water Spray.  
X Wear liquid-tight chemical protective clothing and breathing apparatus. Contain spill and run-off.

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## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Clear area of all unprotected personnel. Ventilate area where possible. Contact emergency services where appropriate.

### 6.2 Environmental precautions

Prevent product from entering drains and waterways.

### 6.3 Methods of cleaning up

Contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal.

### 6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

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## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well ventilated area, removed from incompatible substances, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage, sealed when not in use, vented and stored upright. Check regularly for leaks or spills. Large storage areas should have appropriate ventilation systems.

### 7.3 Specific end uses

No information provided.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

#### Exposure standards

| Ingredient                 | Reference | TWA |                   | STEL |                   |
|----------------------------|-----------|-----|-------------------|------|-------------------|
|                            |           | ppm | mg/m <sup>3</sup> | ppm  | mg/m <sup>3</sup> |
| Chlorine (Peak Limitation) | SWA [AUS] | 1   | 3                 | --   | --                |
| Potassium hydroxide        | SWA [AUS] | --  | 2 (Peak)          | --   | --                |
| SODIUM HYPOCHLORITE        | SWA [AUS] | 1   | 3                 | --   | --                |

#### Biological limits

No biological limit values have been entered for this product.

### 8.2 Exposure controls

**Engineering controls** Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Maintain vapour levels below the recommended exposure standard.

**PRODUCT NAME DESTAIN**

**PPE**

|                    |   |
|--------------------|---|
| <b>Eye / Face</b>  | Wear splash-proof goggles.  |
| <b>Hands</b>       | Wear PVC or rubber gloves.  |
| <b>Body</b>        | Wear coveralls. When using large quantities or where heavy contamination is likely, wear a PVC or a rubber apron. |
| <b>Respiratory</b> | Where an inhalation risk exists, wear a Full-face Type B (acid gas) respirator.                                   |



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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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**9.1 Information on basic physical and chemical properties**

|                                  |                         |
|----------------------------------|-------------------------|
| <b>Appearance</b>                | CLEAR COLOURLESS LIQUID |
| <b>Odour</b>                     | STRONG CHLORINE ODOUR   |
| <b>Flammability</b>              | NON FLAMMABLE           |
| <b>Flash point</b>               | NOT RELEVANT            |
| <b>Boiling point</b>             | NOT AVAILABLE           |
| <b>Melting point</b>             | NOT AVAILABLE           |
| <b>Evaporation rate</b>          | NOT AVAILABLE           |
| <b>pH</b>                        | 14                      |
| <b>Vapour density</b>            | NOT AVAILABLE           |
| <b>Relative density</b>          | 1.1                     |
| <b>Solubility (water)</b>        | NOT AVAILABLE           |
| <b>Vapour pressure</b>           | NOT AVAILABLE           |
| <b>Upper explosion limit</b>     | NOT RELEVANT            |
| <b>Lower explosion limit</b>     | NOT RELEVANT            |
| <b>Partition coefficient</b>     | NOT AVAILABLE           |
| <b>Autoignition temperature</b>  | NOT AVAILABLE           |
| <b>Decomposition temperature</b> | NOT AVAILABLE           |
| <b>Viscosity</b>                 | NOT AVAILABLE           |
| <b>Explosive properties</b>      | NOT AVAILABLE           |
| <b>Oxidising properties</b>      | NOT AVAILABLE           |
| <b>Odour threshold</b>           | NOT AVAILABLE           |

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**10. STABILITY AND REACTIVITY**

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**10.1 Reactivity**

Contact with acids may liberate toxic chlorine gas. May be corrosive to metals.

**10.2 Chemical stability**

Stable under recommended conditions of storage.

**10.3 Possibility of hazardous reactions**

Polymerization will not occur.

**10.4 Conditions to avoid**

Avoid heat, sparks, open flames and other ignition sources.

**10.5 Incompatible materials**

Incompatible (sometimes violently) with oxidising agents (e.g. peroxides), acids (especially hydrochloric - evolving chlorine gas), organic materials, reducing agents (e.g. sulphites), metallic powders, amines, ammonia and heat sources.

**10.6 Hazardous decomposition products**

May evolve toxic gases (chlorine) when heated to decomposition.

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**11. TOXICOLOGICAL INFORMATION**

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**11.1 Information on toxicological effects**

**Acute toxicity** Harmful if swallowed. Ingestion may result in severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach. Contact with acids may liberate toxic chlorine gas.

**Information available for the ingredients:**

| Ingredient          | Oral LD50               | Dermal LD50        | Inhalation LC50               |
|---------------------|-------------------------|--------------------|-------------------------------|
| POTASSIUM HYDROXIDE | 273 to 1230 mg/kg (rat) | --                 | --                            |
| SODIUM HYPOCHLORITE | 5800 mg/kg (mouse)      | --                 | --                            |
| SODIUM SILICATE     | 3400 mg/kg (rat)        | > 5000 mg/kg (rat) | > 2.06 g/m <sup>3</sup> (rat) |

**Skin** Causes severe burns. Contact may result in irritation, redness, pain, rash, dermatitis and severe burns.

**Eye** Causes severe burns. Contact may result in irritation, lacrimation, pain, redness and corneal burns with possible serious eye damage.

**Sensitisation** Not classified as causing skin or respiratory sensitisation.

**Mutagenicity** Not classified as a mutagen.

**Carcinogenicity** Not classified as a carcinogen.

**Reproductive** Not classified as a reproductive toxin.

**STOT - single exposure** Over exposure may result in mucous membrane irritation of the respiratory tract, coughing and possible burns. High level exposure may result in ulceration of the respiratory tract and breathing difficulties. Over exposure to chlorine vapour may result in lung tissue damage. Do not mix with other chemicals unless advised and specific instructions provided, as toxic and irritating gases may be evolved.

**STOT - repeated exposure** Not classified as causing organ damage from repeated exposure. Adverse effects are generally associated with single exposure.

**Aspiration** Not classified as causing aspiration.

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**12. ECOLOGICAL INFORMATION**

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**12.1 Toxicity**

Hypochlorites are extremely toxic to fish; Exposure to 0.5 % over 96 hours resulted in death of trout.

**12.2 Persistence and degradability**

Hypochlorites are non-persistent in the environment and there is no accumulation potential as they gradually decompose into a salt and oxygen.

**12.3 Bioaccumulative potential**

Hypochlorites are non-persistent in the environment and there is no accumulation potential as they gradually decompose into a salt and oxygen.

**12.4 Mobility in soil**

May leach to groundwater with resultant toxicity to aquatic organisms.

**12.5 Other adverse effects**

Avoid release to the environment.

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**13. DISPOSAL CONSIDERATIONS**

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**13.1 Waste treatment methods**

**Waste disposal** Add to a large volume of reducing solution (eg thiosulphate, metabisulphite, but not carbon, sulphur or strong reducer) and acidify with 3M sulphuric acid. When reduction is complete, add mixture to water and neutralise. Absorb with sand or similar non-combustible material and dispose of to an approved landfill site. Contact the manufacturer/supplier for additional information (if required).

**Legislation** Dispose of in accordance with relevant local legislation.

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**14. TRANSPORT INFORMATION**

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**CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE**



|                                    | LAND TRANSPORT (ADG)   | SEA TRANSPORT (IMDG / IMO)   | AIR TRANSPORT (IATA / ICAO)  |
|------------------------------------|--|--|--|
| <b>14.1 UN Number</b>              | 1760   | 1760   | 1760   |
| <b>14.2 Proper Shipping Name</b>   | CORROSIVE LIQUID, N.O.S.<br>(contains potassium hydroxide,<br>sodium hypochlorite) | CORROSIVE LIQUID, N.O.S.<br>(contains potassium hydroxide,<br>sodium hypochlorite) | CORROSIVE LIQUID, N.O.S.<br>(contains potassium hydroxide,<br>sodium hypochlorite) |
| <b>14.3 Transport hazard class</b> | 8  | 8  | 8  |
| <b>14.4 Packing Group</b>          | II   | II   | II   |

**14.5 Environmental hazards**

No information provided.

**14.6 Special precautions for user**

|              |          |
|--------------|----------|
| Hazchem code | 2X       |
| GTEPG        | 8A1      |
| EmS          | F-A, S-B |

**15. REGULATORY INFORMATION**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

|                           |  |
|---------------------------|--|
| <b>Poison schedule</b>    | Classified as a Schedule 6 (S6) Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).  |
| <b>Classifications</b>    | Safe Work Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals (GHS Revision 7). |
| <b>Inventory listings</b> | <b>AUSTRALIA: AIC (Australian Inventory of Industrial Chemicals)</b><br>All components are listed on AIC, or are exempt.                     |

**16. OTHER INFORMATION**

|                               |   |
|-------------------------------|---|
| <b>Additional information</b> | <p><b>RESPIRATORS:</b> In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.</p> <p><b>EXPOSURE STANDARDS - TIME WEIGHTED AVERAGE (TWA) or WES (WORKPLACE EXPOSURE STANDARD) (NZ):</b> Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: Strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).</p> <p><b>PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:</b><br/>The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.</p> |
|-------------------------------|---|

**HEALTH EFFECTS FROM EXPOSURE:**

It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

**Abbreviations**

|                   |   |
|-------------------|---|
| ACGIH             | American Conference of Governmental Industrial Hygienists                                       |
| CAS #             | Chemical Abstract Service number - used to uniquely identify chemical compounds                 |
| CNS               | Central Nervous System  |
| EC No.            | EC No - European Community Number   |
| EMS               | Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)                   |
| GHS               | Globally Harmonized System  |
| GTEPG             | Group Text Emergency Procedure Guide  |
| IARC              | International Agency for Research on Cancer   |
| LC50              | Lethal Concentration, 50% / Median Lethal Concentration   |
| LD50              | Lethal Dose, 50% / Median Lethal Dose   |
| mg/m <sup>3</sup> | Milligrams per Cubic Metre  |
| OEL               | Occupational Exposure Limit   |
| pH                | relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline). |
| ppm               | Parts Per Million   |
| STEL              | Short-Term Exposure Limit   |
| STOT-RE           | Specific target organ toxicity (repeated exposure)  |
| STOT-SE           | Specific target organ toxicity (single exposure)  |
| SUSMP             | Standard for the Uniform Scheduling of Medicines and Poisons                                    |
| SWA               | Safe Work Australia   |
| TLV               | Threshold Limit Value   |
| TWA               | Time Weighted Average   |

**Report status**

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

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