Section 1 - Identification of The Material and Supplier

E.D. Oates Pty Ltd
Trading as Research Products
13-21 Maygar Boulevard
Broadmeadows, Vic, 3047

Phone: 1300 669 686 (business hours)
Fax: (03) 9359 9509
Email: customerservice@oates.com.au
Website: www.oateslaboratories.com.au

Chemical nature: Water solution of ingredients.
Trade Name: CRUSADER SUPER CONCENTRATE
Product Use: Cleaner, general purpose disinfectant, deodorant.
Creation Date: August, 2013
This version issued: August, 2013 and is valid for 5 years from this date.

Section 2 - Hazards Identification

Statement of Hazardous Nature
This product is classified as: Xn, Harmful. Xi, Irritating. N, Dangerous to the environment. Hazardous according to the criteria of SWA.
Not a Dangerous Good according to the Australian Dangerous Goods (ADG) Code.

Risk Phrases: R22, R51, R66, R36/38. Harmful if swallowed. Toxic to aquatic organisms. Repeated exposure may cause skin dryness or cracking. Irritating to eyes and skin.

Safety Phrases: S2, S20, S23, S26, S28, S45, S61, S24/25, S37/39. Keep out of reach of children. When using, do not eat or drink. Do not breathe vapours or mists. In case of contact with eyes, rinse immediately with plenty of water and contact a doctor or Poisons Information Centre. After contact with skin, wash immediately with plenty of soap and water. In case of accident or if you feel unwell, contact a doctor or Poisons Information Centre immediately (show this MSDS where possible). Avoid release to the environment. Refer to special instructions/Safety Data Sheets. Avoid contact with skin and eyes. Wear suitable gloves and eye/face protection.

SUSMP Classification: S5
ADG Classification: None allocated. Not a Dangerous Good under the ADG Code.
UN Number: None allocated

GHS Signal word: WARNING
HAZARD STATEMENT:
AUH066: Repeated exposure may cause skin dryness or cracking.
H302: Harmful if swallowed.
H315: Causes skin irritation.
H320: Causes eye irritation.
H335: May cause respiratory irritation.
H401: Toxic to aquatic life.

PREVENTION
P102: Keep out of reach of children.
P264: Wash contacted areas thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P280: Wear protective gloves, protective clothing and eye or face protection.

RESPONSE
P362: Take off contaminated clothing and wash before reuse.
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.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.

SAFETY DATA SHEET
Poisons Information Centre: 13 1126 from anywhere in Australia, (0800 764 766 in New Zealand)

E.D. Oates Pty Ltd
ABN 61 004 329 462
13-21 Maygar Boulevard, Broadmeadows Vic 3047
Customer Service: 1300 669 686 | Website: www.oateslaboratories.com.au
Oates is a division of GUD Holdings Ltd
ABN 99 004 400 891
Emergency Overview

Physical Description & Colour: Dark green liquid.
Odour: Mild odour.
Major Health Hazards: irritating to eyes and skin, harmful if swallowed, repeated exposure may cause skin dryness or cracking.

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 is a skin irritant. Symptoms may include itchiness and reddening of contacted skin. Other symptoms may also become evident, but all should disappear once exposure has ceased.
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. Available data shows that this product is harmful, but symptoms are not available. 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: No significant ingredient is classified as carcinogenic by IARC.
Section 3 - Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>Conc,%</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quaternary ammonium compound</td>
<td>secret</td>
<td>17</td>
<td>not set</td>
<td>not set</td>
</tr>
<tr>
<td>Alkaline salts</td>
<td>secret</td>
<td>7.5</td>
<td>not set</td>
<td>not set</td>
</tr>
<tr>
<td>Other non hazardous ingredients</td>
<td>secret</td>
<td>5-15</td>
<td>not set</td>
<td>not set</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>to 100</td>
<td>not set</td>
<td>not set</td>
</tr>
</tbody>
</table>

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 MSDS 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 warm water (use non-abrasive soap if necessary) for 10-20 minutes or until product is removed. Under running water, remove contaminated clothing, shoes and leather goods (e.g. watchbands and belts) and completely decontaminate them before reuse or discard. If irritation persists, repeat flushing and seek medical attention.

Eye Contact: Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 20 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 likely to be irritating if inhaled.

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: This product is sold in small packages, and the accidental release from one of these is not usually a cause for concern. For minor spills, clean up, rinsing to sewer and put empty container in garbage. Although no special protective clothing is normally necessary because of occasional minor contact with this product, it is good practice to wear impermeable gloves when handling chemical products. In the event of a major spill, prevent spillage from entering drains or water courses and call emergency services.

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 MSDS 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 packages of this product in a cool place. Make sure that containers of this product are kept tightly closed. Keep containers dry and away from water. 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
- Industrial Eye Protection: AS1336 and AS/NZS 1337
- Occupational Protective Footwear: AS/NZS2210

Exposure Limits

<table>
<thead>
<tr>
<th>Substance</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td></td>
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</tr>
<tr>
<td>Ventilation: This product should only be used in a well ventilated area. If natural ventilation is inadequate, use of a fan is suggested.</td>
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<tr>
<td>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.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin Protection: Prevent skin contact by wearing impervious gloves, clothes and, preferably, apron. Make sure that all skin areas are covered. See below for suitable material types.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protective Material Types: We suggest that protective clothing be made from the following materials: rubber, PVC.</td>
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</tr>
<tr>
<td>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.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eyebaths or eyewash stations and safety deluge showers should be provided near to where this product is being handled commercially.</td>
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</tbody>
</table>
Section 9 - Physical and Chemical Properties:

- **Physical Description & colour:** Dark green liquid.
- **Odour:** Mild odour.
- **Boiling Point:** Approximately 100°C at 100kPa.
- **Freezing/Melting Point:** Below 0°C.
- **Volatile:** Water component.
- **Vapour Pressure:** 2.37 kPa at 20°C (water vapour pressure).
- **Vapour Density:** As for water.
- **Specific Gravity:** 1.05
- **Water Solubility:** Completely soluble in water.
- **pH:** 11.5-12.5 (as supplied)
- **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:** This product should be kept in a cool place, preferably below 30°C. Keep containers tightly closed. Containers should be kept dry.
- **Incompatibilities:** acids, strong oxidising agents, zinc, tin, aluminium and their alloys.
- **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. May form nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas in reducing atmospheres. 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

- **Local Effects:**
  - **Target Organs:** 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.

Section 12 - Ecological Information

- **This product is toxic to aquatic organisms. Insufficient data to be sure of status.**

Section 13 - Disposal Considerations

- **Disposal:** Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service.

Section 14 - Transport Information

- **ADG Code:** This product is not classified as a Dangerous Good. 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: Quaternary ammonium compound, Alkaline salts, are mentioned in the SUSMP.

Section 16 - Other Information

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

Emergency Contact: Phone 13 11 26 (Australia wide)

Acronyms:

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

Please read all labels carefully before using product.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

This MSDS is prepared in accord with the SWA document rPreparation 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

End of Safety Data Sheet