Material Safety Data Sheet

TOP FLIGHT

Classified as hazardous according to criteria of NOHSC

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

<table>
<thead>
<tr>
<th>Product Name</th>
<th>TOP FLIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Code</td>
<td>50</td>
</tr>
<tr>
<td>Company Name</td>
<td>JASOL AUSTRALIA</td>
</tr>
<tr>
<td>Address</td>
<td>41-45 TARNARD DRIVE BRAESIDE VIC 3195</td>
</tr>
<tr>
<td>Emergency Tel.</td>
<td>1800 629953</td>
</tr>
<tr>
<td>Telephone/Fax</td>
<td>Tel: 03 95805722 Fax: 03 95809902</td>
</tr>
<tr>
<td>Recommended Use</td>
<td>Heavy Duty low foam chlorinated dishwashing detergent for automatic dispenser. Refer to product label for instructions.</td>
</tr>
<tr>
<td>Other Names</td>
<td>Not Available</td>
</tr>
<tr>
<td>Other Information</td>
<td>N.Z.: 159 Marua Road, Ellerslie 1005, Ph (09) 571 4385, Fx (09) 571 4388</td>
</tr>
</tbody>
</table>

2. HAZARDS IDENTIFICATION

<table>
<thead>
<tr>
<th>Hazard Classification</th>
<th>HAZARDOUS SUBSTANCE. DANGEROUS GOODS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard classification according to the criteria of NOHSC. Dangerous goods classification according to the Australia Dangerous Goods Code.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Risk Phrase(s)</th>
<th>R35 Causes severe burns.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety Phrase(s)</td>
<td>S2 Keep out of reach of children. S22 Do not breathe dust.</td>
</tr>
</tbody>
</table>
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S45 In case of accident or if you feel unwell seek medical advice immediately
S37/39 Wear suitable gloves and eye/face protection.

Other Information
LD 50 : Sodium hydroxide No data
LDLo : Sodium hydroxide 500 mg/kg oral, rabbit
LD 50 : Sodium dichloroisocyanurate 700 mg/kg oral, rat
6,000 mg/kg skin rabbit

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Name</th>
<th>CAS</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dichloro-1,3,5-triazinetrione, sodium salt</td>
<td>2893-78-9</td>
<td>0-10 %</td>
</tr>
<tr>
<td></td>
<td>Sodium carbonate</td>
<td>497-19-8</td>
<td>10-30 %</td>
</tr>
<tr>
<td></td>
<td>Sodium hydroxide</td>
<td>1310-73-2</td>
<td>10-30 %</td>
</tr>
<tr>
<td></td>
<td>Ingredients determined not to be hazardous</td>
<td></td>
<td>30-60 %</td>
</tr>
<tr>
<td></td>
<td>Alkaline Salts</td>
<td></td>
<td>0-10 %</td>
</tr>
<tr>
<td></td>
<td>Non hazardous surfactants</td>
<td>Mixture</td>
<td>0-10 %</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Inhalation
Remove from exposure, rest and keep warm. Unless exposure has been slight, obtain medical attention.

Ingestion
If swallowed, do NOT induce vomiting. Give a glass of water to be taken slowly.

Skin
If skin contact occurs, remove contaminated clothing and wash skin thoroughly. Wash clothing before re-use.

Eye
If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

First Aid Facilities
Eye wash. Hand wash basin.

Advice to Doctor
Product contains a high proportion of sodium hydroxide and a low proportion of SDIC and soda ash. Vomiting has not been induced because of risk of aspiration into the lungs. If swallowed, may cause holes in stomach and intestines. Evacuation of stomach should not be attempted. Contact Poisons Information Centre.

Symptoms and Effects
No adverse health effects expected if the product is handled in accordance with this MSDS and the product label.
5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media
Water fog or fine water spray.

Hazards from Combustion Products
Carbon dioxide, water vapour, sodium carbonate, chlorine, sodium hypochlorite, cyanuric acid.

Specific Methods
In case of small fire/explosion use water. In case of major emergency use PPE: breathing apparatus and protective gloves.

Specific Hazards
Not flammable. Contact with aluminium, tin, zinc or galvanised iron may generate hydrogen, a flammable gas. Will react vigorously or violently with acids, generating much heat, and giving off carbon dioxide, a simple asphyxiant and chlorine gas, a toxic gas. Contact with ammonium compounds will generate ammonia, a poisonous gas.

Hazchem Code
2X

6. ACCIDENTAL RELEASE MEASURES

Spills & Disposal
Disposal of small spillages only. For large spillages liquids should be contained using sand or earth, and both liquids and solids then transferred to salvage containers. Residues should be treated as for small spillages. CAUTION: Before dealing with spillage take necessary protective measures, inform others to keep at a safe distance and, for flammable materials, shut off all possible sources of ignition.

CARE! Spillages will be slippery when wet. If local regulations permit, mop up with plenty of water and run to waste, diluting greatly with running water. Otherwise transfer to container and arrange removal by disposals company. Wash site of spillage thoroughly with water.

7. HANDLING AND STORAGE

Conditions for Safe Storage
Store in a cool, dry, well ventilated place, out of reach of children. Large quantities should be stored in a dangerous goods store. Store in original container. Keep container tightly closed. Keep container dry. Keep away from acids, aluminium, tin, zinc and galvanised iron. Protect from physical damage. Clean up all spills promptly; avoid secondary accidents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>National Exposure Standards</th>
<th>Name</th>
<th>STEL (mg/m³)</th>
<th>STEL (ppm)</th>
<th>TWA (mg/m³)</th>
<th>TWA (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. PHYSICAL AND CHEMICAL PROPERTIES

Form
Solid

Appearance
White granular powder with a slight chlorine odour.

Odour
Slight smell of chlorine.

Melting Point
No data.

Solubility in Water
Soluble in water with generation of heat.

pH Value
Very alkaline. 12.3-12.6 (1% solution)

Vapour Pressure
None.

Flammability
Not flammable. Contact with aluminium, tin, zinc or galvanised iron may generate hydrogen, a flammable gas.

10. STABILITY AND REACTIVITY

Stability and Reactivity
Will react vigorously or violently with acids, generating great heat and carbon dioxide, a simple asphyxiant and chlorine, a toxic gas. Contact with moisture will generate chlorine. May react violently with calcium hypochlorite. Contact with aluminium, tin, zinc or galvanised iron will generate hydrogen, a flammable gas. Contact with ammonium compounds will generate ammonia, a poisonous gas.

11. TOXICOLOGICAL INFORMATION

Inhalation
Severe irritation of the nose and throat. Can cause inflammation
of the lungs. Risk of permanent damage.

**Ingestion**

Can be fatal. Corrosive. Causes burns to mouth and throat, nausea, vomiting, abdominal pains and diarrhoea (occasionally bloody). Can also cause swelling of the larynx and suffocation, perforation of stomach and intestines with constrictive scarring, heart failure and coma.

**Skin**

Corrosive, causes deep burns.

**Eye**

Corrosive, causes severe irritation and corneal burns. May cause blindness.

**Chronic Effects**

Long term, low level exposure can lead to irritation of skin, lungs, nose, throat and mouth.

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**12. ECOLOGICAL INFORMATION**

**Environment Protection**

Avoid contaminating waterways, drains, sewers, or ground.

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**13. DISPOSAL CONSIDERATIONS**

**Waste Disposal**

Land fill, sewer (small quantities). Refer to Land Waste Management Authority in your State.

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**14. TRANSPORT INFORMATION**

**Transport Information**

Classified as a Class 8 Dangerous Good. Dangerous Goods of Class 8 Corrosives are incompatible in a placard load with any of the following: - Class 1, Class 4.3, Class 5, Class 6, if the Class 6 dangerous goods are cyanides and the Class 8 dangerous goods are acids and Class 7. Store away from acids.

**U.N. Number**

1759

**Proper Shipping Name**

CORROSIVE SOLID, N.O.S.

**DG Class**

8

**Hazchem Code**

2X

**Packaging Method**

3.8.8

**Packing Group**

II

**EPG Number**

8A1

**IERG Number**

37

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**15. REGULATORY INFORMATION**

16. OTHER INFORMATION

The company has taken care in compiling this information. No liability is accepted whether direct or indirect from its application since the conditions of final use are outside the Company's control. The end user is obliged to conform to relevant government regulations and/or patent laws applicable in their respective States of Countries.

Contact Technical Manager in your state for more information.

24-Hour Emergency Telephone: AUS: 1800 629 953 NZ: Poisons 0800 764 766, Spills 111 FIRE

W.A. 131 Garling Street, O'Connor WA 6163, Ph. (08) 9337 4844, Fx (08) 9314 1099
VIC. 41-45 Tarnard Drv, Braeside Vic 3195, Ph. (03) 9580 5722, Fx (03) 9580 9902
S.A. 29-43 Gum Avenue, Dry Creek SA 5094, Fx (08) 8208 0209
QLD. Unit 1/22 Eastern Service Rd, Stapylton QLD 4207, Ph (07) 3380 8100, Fx (07) 3380 8199
NSW. Building A, Level 1, 7-11 Talavera Road, North Ryde NSW 2113, Ph. (02) 9815 7300, Fx (02) 9805 0152
N.Z. 159 Marua Road, Ellerslie 1005, Ph (09) 571 4385, Fx (09) 571 4388
N.Z. 105 Rutherford Street, Christchurch, Ph (03) 384 4433, Fx (03) 384 4431

End of MSDS