1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>Product Name:</th>
<th>1080 Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonyms:</td>
<td>20% Stock solution</td>
</tr>
<tr>
<td>Supplier:</td>
<td>Animal Control Products Ltd</td>
</tr>
<tr>
<td>Street address:</td>
<td>Physical address: 408 Heads Road, Whanganui 4501, New Zealand.</td>
</tr>
<tr>
<td>Postal address:</td>
<td>Postal address: Private Bag 3018, Whanganui 4540, New Zealand.</td>
</tr>
<tr>
<td>Telephone:</td>
<td>64 (0) 6 344 5302</td>
</tr>
<tr>
<td>Website:</td>
<td><a href="http://www.pestoff.co.nz">www.pestoff.co.nz</a></td>
</tr>
<tr>
<td>After hours telephone numbers:</td>
<td>021 919 624</td>
</tr>
</tbody>
</table>

**ACCIDENTAL HUMAN POISONING**

National Poisons Centre: Emergency phone number for spills, transport emergencies and risk mitigation:

Dial 111 and be ready to provide information from the product label to medical personnel.

Free phone 0800 764 766

Dial 111

2. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Product Name:</th>
<th>1080 Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonyms:</td>
<td>20% Stock solution</td>
</tr>
<tr>
<td>Active Ingredient:</td>
<td>Sodium fluoroacetate 20% concentrate w/w</td>
</tr>
<tr>
<td>Other Ingredients:</td>
<td>Water, blackish-purple dye</td>
</tr>
<tr>
<td>Molecular Weight of Active:</td>
<td>100.02</td>
</tr>
<tr>
<td>Molecular Formula of Active:</td>
<td>F C H2 CO2 Na</td>
</tr>
<tr>
<td>Recommended Use:</td>
<td>For mixing with food baits for vertebrate pest control as prescribed by label directions.</td>
</tr>
<tr>
<td>Appearance:</td>
<td>Black or purple low viscosity solution.</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

**STATEMENT OF HAZARDOUS NATURE:** This product contains a DEADLY POISON.

HSNO Approval Code: HSR002427

**HAZARD CLASSES:** 6.1A, 6.3B, 6.4A, 6.8A, 6.9A, 9.1A, 9.3A, 9.4B

**HAZARD IDENTIFIERS:**

- **Secondary Identifiers** - Acutely toxic. May be fatal if swallowed, inhaled or absorbed through the skin. Repeated oral exposure may cause reproductive or developmental damage. When handling open containers or baits, wear protective equipment as indicated below. Toxic to terrestrial vertebrates. Take measures to reduce the risk of non-target animals being exposed to the toxin either through eating baits or by scavenging the carcasses of poisoned animals. Harmful to aquatic organisms. Manage bait application rates carefully and comply with any restrictions imposed on placing baits over or near waterways. Avoid pollution of any water supply with baits or used container.
DANGEROUS GOODS CLASS: 6.1A - Packing Group 1

GENERAL REQUIREMENTS: Deadly Poison. Subject to tracking requirements for individual packs. Available for purchase and use only by holders of Controlled Substances Licenses. This substance must be under the control of an Approved Handler for Class 6 and Class 9 Hazardous substances at all times unless being transported by a transport operator with a Dangerous Goods License endorsement.

SYMPTOMS OF POISONING:

Early Symptoms: Nausea, vomiting, tingling and numbness in face and hands, stomach pains, apprehension and anxiety.

Later Symptoms: Muscular twitching, blurred vision, mental confusion.

Severe Symptoms: Coma, convulsions.

4. FIRST AID MEASURES

Ingestion: Seek immediate medical assistance in all cases where poisoning is suspected. While the National Poisons Centre recommends against inducing vomiting in most poisoning cases, should this material be swallowed, every effort should be made to remove the solution from the mouth and stomach immediately by any available means. Give the patient two glasses of water and induce further vomiting – if necessary, by placing a finger down the throat.

Eye Contact: Wash eyes with copious amounts of water.

Skin Contact: Wash exposed area twice with soap and water, flushing well.

Contaminated Clothing: Remove contaminated clothing and wash before re-use. Wear rubber gloves, overalls and secure footwear when handling 1080. Clothing and gloves must be decontaminated by washing in hot soapy water. Ensure that all solution and contaminated equipment and clothing is secured before removing from the work site.

Do NOT induce vomiting or give anything by mouth if patient is unconscious or convulsing.

PROMPT TREATMENT IS ESSENTIAL. CALL FOR MEDICAL ATTENTION IMMEDIATELY.

5. FIRE FIGHTING MEASURES

1080 solution produces no toxic emissions as either vapours, gases or odours. Hazards arise through contact with the skin, eyes or by ingestion.

6. ACCIDENTAL RELEASE MEASURES

In the event of major spills, inform the Fire Service immediately via the 111 emergency phone service, and then local health protection officers at your District Health Board or hospital. Isolate and cordon off spillage. If possible, recover any spilled solution by using an absorbent material such as dry sawdust. Collect absorbent material and place in appropriately labeled containers. Dispose of absorbent material by incinerating or by burying in a landfill approved for hazardous substances. Wash down the spill area with copious water. Take all practicable steps to manage any harmful effects of a spillage including preventing prepared baits from entering streams or waterways. Scoop spilled baits into secure containers and dispose of spoiled bait as directed below. Use a broom to collect fine material and wash down the spill area with copious water only after all spilled bait has been removed. Give consideration to possible hazards arising from washing down and ensure people, pets, livestock, wildlife and fish will not be exposed to the dilute toxic run-off.
7. Handling and Storage

When handling open containers or preparing baits, wear overalls worn outside rubber boots, a perspex face screen and impervious rubber or PVC gloves. Do not eat, drink or smoke when using the product or handling open containers. Wash protective clothing and equipment daily after work. Remove protective clothing and wash hands and exposed skin thoroughly before meals and after any contact.

Store in original container, tightly closed, under lock and key and away from feed or foodstuffs. Keep out of reach of children. This product must always be under the control of an approved handler who holds a current test certificate endorsed for Class 6 and Class 9 substances.

8. Exposure Controls / Personal Protection

Occupational Exposure Limits: Ministry of Health exposure limit set February 2002 is 0.015 micrograms of 1080 per ml in urine.

Tolerable Exposure Limits (TEL): ERMA NZ has prescribed the TELwater for sodium fluoroacetate, expressed as the amount of sodium fluoroacetate per volume of water as 0.0035 milligrams per litre of water (0.00000035%).

Engineering Measures: Decontaminants are water (dilution), heat > 120°C (denaturing) and microbial decomposition (degradation).

Personal Protection Equipment: Operators using or handling the product in open containers must wear gloves, overalls, PVC apron, Perspex face mask and waterproof boots. Do not smoke, drink or eat while handling the product. Wash hands, face and any exposed areas after use. Wash protective equipment immediately after use or otherwise isolate and containerise for return to a washing facility.

9. Physical and Chemical Properties

Form / Colour / Odour: 1080 solution is a non-viscous blackish-purple solution.

<table>
<thead>
<tr>
<th>Solubility in Water (g/L)</th>
<th>Very water soluble</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decomposition Point (°C)</td>
<td>The active ingredient 1080 decomposes at 200 degrees Celsius and becomes unstable at 110 degrees Celsius.</td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

1080 solution is stable and non-reactive under normal storage and use conditions.

11. Toxicological Information

Exposure must be kept to absolute minimum. Sodium fluoroacetate may be absorbed through the eyes, broken skin or via the mouth.

TOXICITY DATA FOR THE ACTIVE INGREDIENT - VARIOUS SPECIES*

<table>
<thead>
<tr>
<th>Species</th>
<th>LD50 (mg/kg B/W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White laboratory rat</td>
<td>0.2</td>
</tr>
<tr>
<td>Brush-tailed possum</td>
<td>0.3 – 1.0</td>
</tr>
<tr>
<td>Dog</td>
<td>0.1 – 0.35</td>
</tr>
<tr>
<td>Cat</td>
<td>0.35</td>
</tr>
<tr>
<td>Bennett’s wallaby</td>
<td>0.2</td>
</tr>
<tr>
<td>Mule deer</td>
<td>1.0</td>
</tr>
<tr>
<td>Mouse</td>
<td>5.0 – 19.3</td>
</tr>
<tr>
<td>Human</td>
<td>0.7 – 2.1</td>
</tr>
</tbody>
</table>

* Data from US Department of the Interior, Biological Report No. 27 (1995); Ronald Eisler “Sodium monofluoroacetate (1080) Hazards to Fish, Wildlife, and Invertebrates: A Synoptic Review”
12. ECOLOGICAL INFORMATION

Use only for the purpose indicated and in the manner prescribed by the label. Sodium fluoroacetate may be present for many months in the carcasses of poisoned animals; thus presenting a secondary poisoning danger to carnivorous birds and mammals. Take steps to mitigate any potential non-target exposure by wildlife or domestic animals. Studies have shown that 1080 concentrations will decline within rotting carcasses through the microbial degradation of 1080.

1080 wastes are ecotoxic. Improper disposal of excess pesticide is unlawful. If wastes can not be disposed of by use according to label instructions, contact local Regional Council or a hazardous waste advisor for guidance.

13. DISPOSAL CONSIDERATIONS

Product: The best means of disposal is to use the substance for the purpose intended. The active ingredient sodium fluoroacetate is degraded through microbial activity and will decompose at temperatures above 200 degrees Celsius. It dilutes readily in water. Product which cannot be used should be disposed of by incineration after being applied to an absorbent, flammable material such as woodchips; or by treatment through a chemical treatment facility or sewage oxidation facility where this is allowed by local by-laws and regulations.

Container disposal: Triple rinse empty containers, then puncture them before burying in a suitable location at a landfill at a depth of at least 60 cm. Do not use the empty container for any other purpose.

14. TRANSPORT INFORMATION

Proper Shipping Name: Pesticide, liquid, toxic, n.o.s. [contains Sodium fluoroacetate]

U.N. NO: 2902

Class: 6.1

Packing Group: I

Maximum transport quantity as tools of trade: 5 litres

Packaging Approval: (5 litre Jerry Can) UN 4G/X24/S/04/NZ/ACP Ltd

15. REGULATORY INFORMATION

Deadly poison: Available only to holders of Controlled Substances Licenses or persons licensed to transport dangerous goods. Label directions are mandatory. Registered Pesticides:

1080 SOLUTION – V002189. HSNO Approval HSR002427

Packaging approvals: The packaging for these products has been tested and complies with the UN convention for transportation of dangerous goods and with the ERMA NZ HSNO controls and variations stipulated under the 1080 re-assessment decision arising from application HRE05002 and released on 10 August 2007.

16. OTHER INFORMATION

SPECIAL PRECAUTIONS & OTHER COMMENTS:

It is strongly recommended that approved handlers carry an operable telephone, radio telephone or other means of obtaining urgent medical assistance as a precaution when using 1080 poison. Test communication systems and coverage before commencing operations.

May be fatal if swallowed. Wear waterproof gloves when using 1080. Wash hands after handling baits or animals that have been contaminated with 1080. Do not use poisoned or contaminated animals for food or feed.
This product is toxic to wildlife. Birds and mammals feeding on carcasses of contaminated animals may be fatally poisoned. Take measures to minimise the chance of the solution or baits accidentally entering any body of water. Apply the product only as specified by label directions.

Where practicable, the exposed bodies of all poisoned animals should be collected and destroyed by complete burning or deep burial at a landfill approved for hazardous wastes. Dehydrated carcasses may remain dangerous to dogs or cats for an indefinite period. A single mouse poisoned by 1080 may contain enough poison to kill an adult dog.

CONSULT NEAREST POISON CONTROL CENTER FOR CURRENT INFORMATION.

All information contained in this Data Sheet is as accurate and up-to-date as possible. Since Animal Control Products Ltd cannot anticipate or control the conditions under which this information may be used, each user should review the information in the specific context of the intended application.

SDS Revised by: JV Quigley
Revision date: 15 October 2018