Section 1 - Identification of The Material and Supplier

| Turf Culture Pty Ltd | Phone: 1300 11 8873 |
| 43 Gap Road          | Fax: 03 8888 9991   |
| Sunbury, Vic 3429 Australia | www.turfculture.com.au |

Chemical nature: Blend of alkaline and oxidising ingredients.

Trade Name: Turf Culture Refresh Boom Clean

Product Use: Pesticide decontaminant that will successfully decontaminate virtually all pesticides including sulfonylurea and phenoxy based herbicides.

Creation Date: October, 2013

This version issued: November, 2019 and is valid for 5 years from this date.

Section 2 - Hazards Identification

Statement of Hazardous Nature

This product is classified as: N, Dangerous to the environment. C, Corrosive. Hazardous according to the criteria of SWA.

Dangerous according to Australian Dangerous Goods (ADG) Code, IATA and IMDG/IMSBC criteria.

Note that packages containing less than the limited quantity value for this product (i.e. 5kg) need not be labelled or carried as a Dangerous Good when carried by Road or Rail in Australia.

Risk Phrases: R31, R34, R37, R50. Contact with acids liberates toxic chlorine gas. Causes burns. Irritating to respiratory system. Very toxic to aquatic organisms.

Safety Phrases: S20, S22, S28, S38, S45, S50, S61, S24/25, S37/39. When using, do not eat or drink. Do not breathe dust. After contact with skin, wash immediately with plenty of water. In case of insufficient ventilation, wear suitable respiratory equipment. In case of accident or if you feel unwell, contact a doctor or Poisons Information Centre immediately (show this SDS where possible). Do not mix with acids. 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: S6

ADG Classification: Class 8: Corrosive Substances.

UN Number: 3262, CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.

GHS Signal word: DANGER

HAZARD STATEMENT:

H290: May be corrosive to metals.
AUH031: Contact with acids liberates toxic chlorine gas.
H314: Causes severe skin burns and eye damage.
H400: Very toxic to aquatic life.

PREVENTION

P102: Keep out of reach of children.
P234: Keep only in original container.
P260: Do not breathe dusts.
P264: Wash contacted areas thoroughly after handling.
P280: Wear protective gloves, protective clothing and eye or face protection.

RESPONSE

P310: Immediately call a POISON CENTRE or doctor/physician.
P363: Wash contaminated clothing before reuse.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P351+P338: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water.
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position 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.
P332+P313: If skin irritation occurs: Get medical advice.
P337+P313: If eye irritation persists: Get medical advice.

SAFETY DATA SHEET

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Poisons Information Centre: 13 11 26 from anywhere in Australia
P391: Collect spillage.
P370+P378: Not combustible. Use extinguishing media suited to burning materials. Water fog or fine spray is the preferred medium for large fires.

**STORAGE**
P402-P404: Store in a dry place. Store in a closed container.

**DISPOSAL**
P501: 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.

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**Emergency Overview**

**Physical Description & Colour:** Blue to off white free-flowing granules.

**Odour:** Mild chlorine odour.

**Major Health Hazards:** causes burns, respiratory tract irritant.

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**Potential Health Effects**

**Inhalation:**

**Short Term Exposure:** Available data indicates that this product is an inhalation irritant. Symptoms may include headache, irritation of nose and throat and increased secretion of mucous in the nose and throat. Other symptoms may also become evident, but they should disappear after exposure has ceased.

**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 corrosive to the skin. Capable of causing moderate to severe burns with ulceration. Can penetrate to deeper layers of skin, resulting in third degree burns. Corrosion will continue until product is removed or neutralised. Severity depends on concentration and duration of exposure. Burns may not be immediately painful; the onset of pain may be minutes to hours.

**Long Term Exposure:** Repeated or prolonged skin contact can cause chronic dermatitis.

**Eye Contact:**

**Short Term Exposure:** This product is corrosive to eyes. It will cause severe pain, and corrosion of the eye and surrounding facial tissues. Unless exposure is quickly treated, permanent blindness and facial scarring is likely.

**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. However, this product is corrosive to the gastrointestinal tract. Capable of causing moderate to severe burns with ulceration. Can penetrate to deeper layers of skin, resulting in third degree burns. Corrosion will continue until product is removed or neutralised. Severity depends on concentration and duration of exposure.

**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.

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### Section 3 - Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>Conc,%</th>
<th>TWA (mg/m$^3$)</th>
<th>STEL (mg/m$^3$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available chlorine as Sodium hypochlorite</td>
<td>7681-52-9</td>
<td>80g/kg</td>
<td>not set</td>
<td>not set</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>1310-73-2</td>
<td>70g/kg</td>
<td>2</td>
<td>Peak</td>
</tr>
<tr>
<td>Sodium tripolyphosphate</td>
<td>7758-29-4</td>
<td>200g/kg</td>
<td>not set</td>
<td>not set</td>
</tr>
<tr>
<td>Other non hazardous ingredients</td>
<td>secret</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 SDS with you when you call.

Inhalation: If irritation occurs, contact a Poisons Information Centre, or call a doctor. Remove source of contamination or move victim to fresh air. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. In severe cases, symptoms of pulmonary oedema can be delayed up to 48 hours after exposure.

Skin Contact: Quickly and gently brush away excess particles. Seek immediate medical attention. Remove contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Flush contaminated area with lukewarm, gently flowing water for at least 20-30 minutes, by the clock. DO NOT INTERRUPT FLUSHING. If necessary, keep emergency vehicle waiting (show paramedics this SDS and take their advice). If irritation persists, repeat flushing. Seek medical attention.

Eye Contact: Quickly and gently brush particles from eyes. Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for at least 20-30 minutes, by the clock, while holding the eyelid(s) open. Neutral saline solution may be used as soon as it is available. DO NOT INTERRUPT FLUSHING. If necessary, keep emergency vehicle waiting (show paramedics this SDS and take their advice). Take care not to rinse contaminated water into the unaffected eye or onto face. If irritation persists, repeat flushing. Call a Poisons Information Centre or a doctor urgently. Take special care if exposed person is wearing contact lenses.

Ingestion: If swallowed, do NOT induce vomiting; rinse mouth thoroughly with water and contact a Poisons Information Centre. Urgent hospital treatment is likely to be needed. Give activated charcoal if instructed.

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: There is little risk of an explosion from this product if commercial quantities are involved in a fire.

Only small quantities of decomposition products are expected from this product at temperatures normally achieved in a fire.

Fire decomposition products from this product are likely to be irritating if inhaled.

Extinguishing Media: Water fog or fine spray is the preferred medium for large fires. Try to contain spills, minimise spillage entering drains or water courses.

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade. There is little danger of a violent reaction or explosion if significant quantities of this product are involved in a fire. Recommended personal protective equipment is liquid-tight chemical protective clothing and breathing apparatus.

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, neutralise with sodium thiosulphate and weak or dilute acid. 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 SDS 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 in a cool, well ventilated area. Check containers periodically for corrosion and leaks. Containers should be kept closed in order to minimise contamination. Make sure that the product does not come into contact with substances listed under “Incompatibilities” in Section 10. If you keep more than 10000kg or L of Dangerous Goods of Packaging Group III, you may be required to license the premises or notify your Dangerous Goods authority.
Section 8 - Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:


**SWA Exposure Limits**

<table>
<thead>
<tr>
<th>Substance</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>2</td>
<td>Peak</td>
</tr>
</tbody>
</table>

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.

**Ventilation:** This product should only be used in a well ventilated area. If natural ventilation is inadequate, use of a fan is suggested.

**Eye Protection:** Your eyes must be completely protected from this product by splash resistant goggles with face shield. All surrounding skin areas must be covered. Emergency eye wash facilities must also be available in an area close to where this product is being used.

**Skin Protection:** Because of the dangerous nature of this product, make sure that all skin areas are completely covered by impermeable gloves, overalls, hair covering, apron and face shield. See below for suitable material types.

**Protective Material Types:** We suggest that protective clothing be made from the following materials: rubber, Viton, nitrile, butyl rubber, Barricade, neoprene, Teflon, polyethylene, PE/EVAL, Saranex, Responder.

**Respirator:** If there is a significant chance that dusts are likely to build up in the area where this product is being used, we recommend that you use a suitable Dust Mask. Safety deluge showers should, if practical, be provided near to where this product is being handled commercially.

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**Section 9 - Physical and Chemical Properties:**

**Physical Description & colour:** Blue to Off white free-flowing granules.

**Odour:** Mild chlorine odour.

**Boiling Point:** Not applicable.

**Freezing/Melting Point:** Decomposes before melting.

**Vapour Pressure:** Negligible at normal ambient temperatures.

**Vapour Density:** Not applicable.

**Specific Gravity:** No data. Bulk density 1.06

**Water Solubility:** Completely soluble.

**pH:** >12 (concentration not stated).

**Volatility:** Negligible at normal ambient temperatures.

**Odour Threshold:** No data.

**Evaporation Rate:** Not applicable.

**Coeff Oil/water Distribution:** No data

**Viscosity:** Not applicable.

**Autoignition temp:** Not applicable - does not burn.

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**Section 10 - Stability and Reactivity**

**Reactivity:** Keep away from water, acids and readily oxidisable materials. Corrosive to many metals with the liberation of extremely flammable hydrogen gas. Reacts violently with acids. Reacts with ammonium salts liberating ammonium gas. Reacts exothermically with water. Absorbs carbon dioxide from the air.

**Conditions to Avoid:** Keep containers tightly closed. Containers should be kept dry.

**Incompatibilities:** water, acids, 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. May form compounds of chlorine and sodium compounds.

**Polymerisation:** This product will not undergo polymerisation reactions.

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**Section 11 - Toxicological Information**

**Local Effects:**

**Target Organs:** There is no data to hand indicating any particular target organs.

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**SAFETY DATA SHEET**

Issued by: Turf Culture Pty Ltd

Phone: 1300 11 8873

Poisons Information Centre: 13 11 26 from anywhere in Australia
Classification of Hazardous Ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Risk Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hypochlorite</td>
<td>&gt;=5%Conc&lt;10%: Xi; R36/38; R31</td>
</tr>
<tr>
<td>Sodium Hydroxide</td>
<td>&gt;=2%Conc&lt;5%: C; R34</td>
</tr>
</tbody>
</table>

Section 12 - Ecological Information

This product is very toxic to aquatic organisms. Salts, acids and bases are typically diluted and neutralised when released to the environment in small quantities. However, until diluted or neutralised it will kill all aquatic organisms it contacts due to extreme pH and the presence of hypochlorite.

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: 3262, CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.
Hazchem Code: 2X
Limited quantities: ADG 7 specifies a Limited Quantity value of 5 kg for this class of product.
Dangerous Goods Class: Class 8: Corrosive Substances.
Packaging Group: III
Packaging Method: P002, IBC08, LP02

Class 8 Corrosive Substances shall not be loaded in the same vehicle or packed in the same freight container with Classes 1 (Explosives), 4.3 (Dangerous When Wet Substances), 5.1 (Oxidising Agents), 5.2 (Organic Peroxides), 6 (Toxic Substances where the Toxic Substances are cyanides and the Corrosives are acids), 7 (Radioactive Substances), Foodstuffs and foodstuff empties. They may however be loaded in the same vehicle or packed in the same freight container with Classes 2.1 (Flammable Gases), 2.2 (Non-Flammable, Non-Toxic Gases), 2.3 (Poisonous Gases), 3 (Flammable liquids), 4.1 (Flammable Solids), 4.2 (Spontaneously Combustible Substances), 6 (Toxic Substances except where the Toxic Substances are cyanides and the Corrosives are acids) and 9 (Miscellaneous Dangerous Goods).

Section 15 - Regulatory Information

AICS: All of the significant ingredients in this formulation are compliant with NICNAS regulations.

The following ingredients: Available chlorine, Sodium hydroxide, Sodium tripolyphosphate (an alkaline salt), are mentioned in the SUSMP.

Note that packages containing less than the limited quantity value for this product (i.e. 5kg) need not be labelled or carried as a Dangerous Good when carried by Road or Rail in Australia.

Section 16 - Other Information

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

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>

THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS SDS 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.
Please read all labels carefully before using product.

This SDS is prepared in accord with the SWA document “Preparation of Safety Data Sheets for Hazardous Chemicals - Code of Practice” (December 2011)