POLYFLOC FLOCCULENT

Section 1 -- PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>PRODUCT NAME</th>
<th>HMIS CODES</th>
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<tbody>
<tr>
<td>POLYFLOC Flocculent</td>
<td>Health 2</td>
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<tr>
<td>PRODUCT CODES</td>
<td>Flammability 2</td>
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<tr>
<td>PFF/1, PFF/5 PFF/20</td>
<td>Reactivity 0</td>
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<tr>
<td>CHEMICAL FAMILY</td>
<td>PPI B</td>
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<tr>
<td>Organic/Inorganic</td>
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<td>USE</td>
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<td>Water Treatment</td>
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<tr>
<td>MANUFACTURER'S NAME</td>
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<tr>
<td>Greenleaf Solutions Ltd</td>
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<td>PO Box 64-125</td>
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<td>Botany, Auckland NZ 1703</td>
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<td>DATE OF PREPARATION</td>
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<td>15th December, 2012</td>
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EMERGENCY TELEPHONE NO.

Poisons Information Centre
New Zealand 0800-764-766
Australia 13-1126

TECHNICAL SERVICE TELEPHONE NO.

0064-9-272 4141

Section 2 -- COMPOSITION/INFORMATION ON INGREDIENTS

ALUMINIUM SULFATE 20-30% CAS 10043-01-3

Section 3 -- HAZARDS IDENTIFICATION 8.3A 6.3B

SUMMARY OF ACUTE HAZARDS

Slightly corrosive. This product has the potential to cause adverse health effects with eye contact or prolonged skin contact. Aluminium sulphate hydrolyses to form sulphuric acid. Due to the low vapour pressure of this product an inhalation hazard is not anticipated with normal use. Use safe work practices to avoid direct eye or skin contact and vapour/ mist generation-inhalation.

Eye Corrosive - severe irritant. Exposure may result in pain, redness, corneal burns and ulceration with possible permanent damage with prolonged contact.

Inhalation Slightly corrosive - irritant. Over exposure at high levels may result in mucous membrane irritation of the nose and throat with coughing. Due to the low vapour pressure of this product an inhalation hazard is not anticipated.

Skin Slightly corrosive. Prolonged contact may result in irritation, skin rash, dermatitis, ulceration and burns.

Ingestion Slightly corrosive. Ingestion may result in ulceration to the mouth and throat with nausea and vomiting.

Section 4 -- FIRST AID MEASURES

Eye Flush gently with running water, holding eyelids open for 20 minute period. Seek immediate medical attention.

Inhalation Leave area of exposure immediately. If symptoms occur, seek urgent medical attention. If assisting a victim avoid becoming a casualty, wear a Full-face Type B (Inorganic and acid gas) respirator or Air-line respirator (in poorly ventilated areas). If victim is not breathing apply artificial respiration.

Skin Remove contaminated clothing and gently flush affected areas with water. Seek medical attention if irritation develops. Launder clothing before reuse.
Ingestion If poisoning occurs, contact a Doctor or Poisons Information Centre on 13 11 26 (Australia Wide). Do not induce vomiting. Give a glass of water to drink. Seek urgent medical attention.

Section 5 -- FIRE FIGHTING MEASURES

Non flammable. If product is present in a fire, toxic gases may be evolved. Evacuate area and contact emergency services. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use water fog to cool intact containers and nearby storage areas. Extinguishing Non flammable. Prevent contamination of drains or waterways, absorb runoff with sand or similar.

Section 6 -- ACCIDENTAL RELEASE MEASURES

Spillage For liquid spills: contact emergency services. Clear area of unprotected personnel. Ventilate area where possible. Wear PVC gloves, a Full-face Type B (Inorganic and acid gas) respirator or Air-line respirator, full-length PVC coveralls & boots. Cover with sodium bicarbonate or 50-50 mixture of sodium carbonate & calcium hydroxide. Collect for complete neutralisation & appropriate disposal.

Section 7 -- HANDLING AND STORAGE

Storage Store in secured, cool, dry, well ventilated area, removed from alkalis (e.g. sodium hydroxide), most metals and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills. Large storage areas should have appropriate fire prevention and ventilation systems.

Section 8 -- EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION (SPECIFY TYPE): In confined, poorly ventilated areas, use NIOSH/MSHA approved air purifying or supplied air respirators during soldering operations until fumes have dissipated.
VENTILATION - LOCAL EXHAUST: Acceptable
SPECIAL: Explosion proof
MECHANICAL (GENERAL): Acceptable
OTHER: N/A
PROTECTIVE GLOVES: Wear rubber gloves.
EYE PROTECTION: Safety glasses (ANSI Z-87.1 or equivalent)
OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Chemical resistant coveralls
WORK/HYGIENIC PRACTICES: Where use can result in skin contact, wash exposed areas thoroughly before eating, drinking, smoking, or leaving work area. Launder contaminated clothing before reuse.
Section 9 -- PHYSICAL AND CHEMICAL PROPERTIES

Flammability: NON FLAMMABLE Flashed Point: NOT RELEVANT
Boiling Point: NOT AVAILABLE Melting Point: NOT RELEVANT
Exposure Standard (TWA): 2 mg/m3 Aluminium dust Evaporation Rate: NOT AVAILABLE
pH: NOT AVAILABLE % Volatiles: NOT AVAILABLE
Specific Gravity: 1.3 Solubility: SOLUBLE
Vapour Pressure: NOT AVAILABLE Upper Explosion Limit: NOT RELEVANT
Lower Explosion Limit: NOT RELEVANT

Section 10 -- STABILITY AND REACTIVITY

STABILITY: Stable
CONDITIONS TO AVOID: None
INCOMPATIBILITY (MATERIALS TO AVOID): Oxidizers, acids and bases.
HAZARDOUS DECOMPOSITION PRODUCTS: CO, CO, and fragmented hydrocarbons.
HAZARDOUS POLYMERIZATION: Will not occur.

Section 11 -- TOXICOLOGY INFORMATION

CHRONIC HEALTH HAZARDS
Large discharges may contribute to the acidification of water and soil and will injure aquatic life and soil micro-organisms

TOXICOLOGY DATA
LD50 6207 mg/kg (Oral-Mouse)

Section 12 -- Ecological Information

ECOLOGICAL DATA
Unlikely to cause harmful effects
Remains indefinitely in the environment as Hydroxide

Section 13 -- DISPOSAL CONSIDERATIONS

Wearing the protective equipment detailed above, neutralise to pH 6-8 by SLOW addition to a saturated sodium bicarbonate solution or similar basic solution. Dilute with excess water and flush to drain. Waste disposal should only be undertaken in a well ventilated area or using a fume cupboard. Do not add water to un-reacted acidic products.
Transport Not regulated for transport purposes.

Section 14 -- TRANSPORTATION INFORMATION

Transport Not regulated for transport purposes.
Section 15 -- REGULATORY INFORMATION

REGULATORY DATA
EEC Classification: Irritant  Hazard Symbol Xi

Section 16 -- OTHER INFORMATION

The information contained in this safety data sheet is given in good faith. It is accurate to the best of our knowledge and belief and represents the most up to date information. The information given in this data sheet does not constitute or replace the users own assessment of workplace risk as required by other health and safety legislation.