

X-CHANGE®

Date of Issue: 29th September 2006

1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

Chemical name of active ingredient(s): Proprietary blend of water conditioning agents, acidifying agents, pH buffers and anti-foam

Recommended use: Water conditioning

Supplier: Elliott Technologies Limited
45 Kitchener Road
Pukekohe
Phone 0800 100 325

Emergency telephone number: 0800 Poison (0800 764 766) 24 Hours

2. HAZARDS IDENTIFICATION

Hazard Classification: Harmful – 6.4A
Ecotoxic - 9.1C

Required identification Details: KEEP OUT OF REACH OF CHILDREN

HARMFUL - may cause eye irritation
ECOTOXIC – harmful to aquatic life with long-lasting effects.
Avoid contamination of any water supply with product or empty container.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation Information on hazardous ingredients

Common name	CAS No	%
Ammonium Sulphate	7783-20-2	2-30%
Citric Acid	77-92-9	5-35%
Diethylene glycol	111-46-6	5-35%

4. FIRST-AID MEASURES

Description of necessary first aid measures:

Effects and symptoms

First-aid measures

Inhalation:

Remove victim to fresh air. Apply artificial respiration if necessary.

Ingestion:

If swallowed, give large quantities of water. Do not induce vomiting unless told by a Doctor. Call a physician
May irritate skin. Wash with soap and water. Get medical attention if irritation persists.

Skin contact:

Eye contact:

If concentrate is splashed in the eyes, flush with running water for at least 15 minutes. Get medical attention if

irritation persists.

Notes to a physician:

5. FIRE-FIGHTING MEASURES

HAZCHEM Code:	2Z
Extinguishing media :	Carbon dioxide (CO ₂), dry chemical, Water spray, fog, water spray.
Hazardous thermal (de)composition products:	May include carbon oxides
Protection of fire-fighters:	Wear full protective clothing and self-contained breathing apparatus. Do not breath smoke or gases.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Avoid contact with skin and eyes. Do not inhale spray. Wear long sleeved shirt, long pants, waterproof gloves and safety goggles or face shield. Do not eat, drink or smoke when using. Wash hands and face before meals and after work.
Environmental precautions:	Do NOT allow spilled product or wash solution to enter sewers, drains, dams, creeks or any other waterways.
Methods for cleaning up:	In the case of spillage, contain and absorb spilled material with absorbent material such as sand clay or cat litter. Keep out animals and unprotected persons. Keep material out of streams and sewers. Vacuum, shovel or pump waste into an approved drum. To decontaminate spill area, tools and equipment, wash with a suitable solution (ie organic solvent, detergent, bleach or caustic) and add the solution to the drums of wastes already collected. Label for contents. Dispose of drummed wastes, including decontamination solution, in accordance with the requirements of Local Authorities

7. HANDLING AND STORAGE

Handling:	When mixing or applying, avoid contact with skin and eyes. Wear protective clothing, gloves and goggles. Do not eat or drink while using. Wash hands and face before meals and after work. Wash protective clothing after work.
Storage:	Store in original container tightly closed and in a locked, dry, cool, well ventilated area, away from feed, seeds and foodstuffs.
Packaging materials:	HDPE Plastic

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace Exposure Guidelines

Workplace exposure standards:	No exposure limit allocated.
Exposure Standards outside: The workplace:	No exposure standards have been set for this product or the active ingredients.
<u>Engineering measures</u>	
Exposure control measures:	Ensure ventilation is adequate, generally natural ventilation is adequate.
<u>Personal Protective Equipment</u>	
Detail specifications for equipment: Respiratory system:	Do not inhale spray mist.
Skin and body:	When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length and PVC/nitrile gloves and goggles.
Hands:	Elbow-length and PVC/nitrile gloves
Eyes:	Wear goggles.
General hygiene:	After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash contaminated clothing and safety equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Colour:	Clear
Odour:	Smells like vinegar
pH:	3 at 100% concentration
Vapour Pressure:	Not established
Boiling Point:	Not established
Freezing/melting point:	N/A
Solubility:	Completely soluble
Specific gravity or density:	1.104 g/ cm ³
Information for flammable material including:	
Octanol/water partition coefficient:	Not available
Explosion properties:	Not explosive
Oxidation properties:	Not an oxidizer

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to avoid:	Avoid contact with strong alkalis
Materials to avoid:	Not available
Hazardous decomposition Products:	May include nitrogen and carbon oxides.

Hazardous polymerization: Will not occur
Specific Data:
Hazardous reactions : None known.

11. TOXICOLOGICAL INFORMATION

Acute toxicity – Oral : LD₅₀ >3870 mg/kg (rat)
Acute toxicity - Dermal : LD₅₀ >2000 mg/kg (rabbit)
Acute toxicity – Inhalation: LC₅₀ > 2.88 mg/1/4h

Skin irritation : Mild or slight irritation at 72 hours
Eye irritation: Corneal involvement or irritation clearing in 7 days or less

Sensitization : Not a sensitizer.

Chronic toxicity No data available on this formulation.

Other information :

12. ECOLOGICAL INFORMATION

Ecotoxicity 96 hr LC₅₀: 70.7 mg/L (Zebra Fish)
24 hr EC₅₀: >100 mg/l (Daphnia)
96 hr EC₅₀: 46.3 mg/l (Algae)

Bees Not established

Soil Not established
Bioaccumulative potential : Not established

Birds Not established

13. DISPOSAL CONSIDERATIONS

Methods of disposal : Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, follow the recommendations in NZS 8409.
CONTAINER DISPOSAL: Triple rinse container and add residue to spray tank. Burn if permitted and circumstances, especially wind direction allow, otherwise bury in landfill.

14. TRANSPORT INFORMATION -International transport regulations

UN number: Not applicable
Class or Division: Not regulated
Classification Code: Not a Dangerous Good.
Packing Group: IMDG Pack. Group III
Marine Pollutant: N/A
Proper shipping name : N/A

INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA):

15. REGULATORY INFORMATION

ACVM Registered Number:
HSNO Approval Code:

Not applicable
HSR002503

16. OTHER INFORMATION

Additional information:

Original Issue Date: 29 September 2006

Revision Date: N/A

Replaces: N/A

Disclaimer EXCLUSION OF LIABILITY: PLEASE READ

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