

SAFETY DATA SHEET

Astral®

Date of Issue: 16th May 2007

1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

Chemical name of active ingredient(s): Potassium Bicarbonate
Recommended use: Disease control in Apples

Supplier: Elliott Technologies Limited
42 Ormiston Road
East Tamaki
Phone 0800 100 325

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

2. HAZARDS IDENTIFICATION

Hazard Classification: 6.1E, 6.4A, 9.1D
Required identification Details: May be harmful if swallowed, inhaled or absorbed through the skin. May cause eye irritation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation Information on hazardous ingredients

Common name	CAS No	%
Potassium Bicarbonate	298-14-6	85%

4. FIRST-AID MEASURES

Description of necessary first aid measures:

Effects and symptoms

First-aid measures

Inhalation: Remove to area free from risk of further exposure. Treat symptomatically.

Ingestion: If swallowed, do not induce vomiting. If person is conscious, give water to drink. Never give anything orally to an unconscious person. Seek medical attention.

Skin contact: Remove contaminated clothing. Flush exposed areas thoroughly with water. Seek medical attention if irritation develops.

Eye contact: Check for and remove contacts if present. Immediately flush eyes with clean flowing water, low pressure and lukewarm if possible, occasionally lifting upper and lower eyelids. Seek medical attention if irritation persists.

Notes to a physician: Ingestion of large doses may produce systemic alkalosis.

Treatment based on judgement of physician in response to reactions of the patient.

5. FIRE-FIGHTING MEASURES

HAZCHEM Code:	4w
Extinguishing media :	Non-combustible material. Use extinguishing media for surrounding fire.
Hazardous thermal (de)composition products:	Thermal decomposition may emit carbon dioxide, oxides of sulphur, and potassium oxide.
Protection of fire-fighters:	Firefighters should wear full protective equipment including bunker gear and a self-contained breathing apparatus (SCBA).

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Avoid skin and eye contact. Avoid breathing dust or spray mist. Do not eat, drink or smoke while using. When mixing or applying wear waterproof gloves, hat, face shield or safety goggles, overalls and footwear. Wash hands and face before meals and after work.
Environmental precautions:	
Methods for cleaning up:	Wear skin, eye and respiratory protection .Close off area of spill during cleanup. Sweep up material and place into waste containers for disposal. Avoid stirring up dust. Cover and label containers and remove from spill area for later disposal. Flush area thoroughly with water. Solutions may create slippery surfaces. Make sure surface is slip-free before reopening to traffic

7. HANDLING AND STORAGE

Handling:	Store in original containers in a cool dry place away from incompatible materials (acids). If product must be transferred, use only clean containers, label them appropriately, and keep containers closed during storage. Minimize airborne dusts and avoid contact with product during transfer, use and clean up. Wear appropriate protective equipment.
Storage:	Keep out of reach of children. Store in original container, tightly closed and under lock and key. Do not store with Class 1,2,3,2,4 or 5 substances or feed, seeds or foodstuffs. Stores containing more than 1,000 kg of this product require secondary containment and are subject to signage.
Packaging materials:	Multiwall Paper Bags with plastic liner.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace Exposure Guidelines

Workplace exposure standards: TEL:	Not established
EEL:	
Exposure Standards outside: The workplace:	Not established

Engineering measures

Exposure control measures:	Avoid generating dust. Provide local exhaust ventilation to meet permissible exposure limit where dusts may occur.
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Personal Protective Equipment

Detail specifications for equipment:	None required
Respiratory system:	If dust is generated, use a NIOSH/MSHA approved dust respirator.
Skin and body:	No special requirements beyond full cover clothing to protect against skin contact.
Hands:	Chemical resistant gloves are recommended for repeated or prolonged contact with powder or dusts. Wear impermeable gloves for repeated or prolonged contact with solutions.
Eyes:	Chemical safety goggles are recommended when handling powder or solutions to protect from exposure to dusts, mists or splashes.
General hygiene:	Wash hands and exposed skin before meals and after work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State, odour & colour:	White to off-white powder; mild characteristic odour.
pH:	@1% solution: 8 - 8.4
Vapour Pressure:	Not applicable
Vapour Density:	0.760 - 0.860 g/cc
Boiling Point:	Not applicable
Freezing/melting point:	Not applicable
Solubility:	Appreciable
Specific gravity or density:	0.760 - 0.860 g/cc
Flashpoint:	Not applicable
Octanol/water partition coefficient:	Not known
Explosion properties:	Not applicable

Oxidation properties: Not an oxidiser

10. STABILITY AND REACTIVITY

Stability: Stable
Conditions to avoid: Highly acidic
Materials to avoid: Acids
Hazardous decomposition Products: Reacts with acids to yield carbon dioxide gas which can accumulate in confined spaces. Do not enter confined spaces until they have been well ventilated and determined to be safe.
Hazardous polymerization: Does not polymerize
Specific Data:
Hazardous reactions : Acids

11. TOXICOLOGICAL INFORMATION

Acute toxicity – Oral : LD₅₀ (rat) 2700 mg/kg. Low toxicity. Ingestion of small amounts (teaspoonful) not likely to cause injury. Ingestion of larger amounts may cause abdominal discomfort and injury.
Acute toxicity-Dermal : LD₅₀ >5000 mg/kg. None toxic
Acute toxicity-Inhalation: LC₅₀ >2.3 mg/l. Inhalation of dusts may cause irritation to the nose, throat and lungs.
Skin irritation : The Primary Dermal Irritation Index (rabbit) was 0.17. Product was not a skin sensitizer (Buehler Method).
Eye irritation: The 1-hour MMTS (rabbit-unw) was 16.3. Effects were fully reversible by day 7. The MMTS (unw) for a 0.5% active ingredient use dilution was 0.3 (classified as non-irritating).
Sensitization : Not a primary skin irritant. Various severities of irritation are possible on prolonged, repeated or occluded contact.
Chronic toxicity None known.

12. ECOLOGICAL INFORMATION

Ecotoxicity No significant environmental effects

13. DISPOSAL CONSIDERATIONS

Methods of disposal : Landfill in accordance with all local environmental regulations. Dilute and drain small amounts (spill residues) to sewer or other waste handling system as local regulations permit

14. TRANSPORT INFORMATION - International transport regulations

UN number:	Not A dangerous goods
Class or Division:	N/A
Sub Class:	N/A
Packing Group:	N/A
Marine Pollutant:	N/A
Proper shipping name :	N/A
Other Information:	N/A

15. REGULATORY INFORMATION

ACVM Registered Number:
HSNO Approval Code:

16. OTHER INFORMATION

Additional information: **Original Issue Date:** 16th May 2007
Revision Date: N/A

Disclaimer

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