**NEOGEN**
CORPORATION

# MATERIAL SAFETY DATA SHEET

## Section I – Product Information

| Product Name or Identity: | Agri-Screen Ticket Pesticide Detectors | | |
|---|---|---|---|
| | AT-10 Kit, 10 Samples (8920),    AT-25 Kit, 25 Samples (8921) | | |
| | Bulk Tickets and Ampules (8924),  Activator Ampules (8951) | | |
| **Manufacturer's Name:** | Neogen Corporation | **Emergency Phone No.:** | 517/372-9200 |
| | 620 Lesher Place | **Fax No.:** | 517/372-0108 |
| | Lansing, Michigan 48912 | **e-mail:** | neogen-info@neogen.com |
| **Date Prepared or Revised:** 11/20/01 | | | |

## Section II – Hazardous Ingredients / Identity Information

| Hazardous Components (Specific Chemical Identity: Common Names) | OSHA PEL (Permissible Exposure Limits) | ACGIH TLV (Threshold Limit Value) | Toxicity Data $LD_{50}$ |
|---|---|---|---|
| Bromine Solution | 0.1 ppm/mg/m$^3$ (Bromine) | 0.1 ppm/mg/m$^3$ (Bromine) | ORL-RAT, 2.6 g/kg (Bromine) |

## Section III – Physical Characteristics

| | |
|---|---|
| **Boiling Point:** 59.5°C (Bromine) | **Specific Gravity ($H_2O$ = 1):** 3.102 (Bromine) |
| **Vapor Pressure (mm Hg.):** 175 mm at 20°C (Bromine) | **Melting Point:** -7.25°C (Bromine) |
| **Vapor Density (AIR = 1):** 7.14 (Bromine) | **Evaporation Rate (Butyl Acetate = 1):** N/A |

**Solubility in Water:** Soluble

**Appearance and Odor:** Yellow liquid, characteristic Bromine odor.

## Section IV – Fire and Explosion Hazard Data

| Flash Point (Closed Cup): N/A | Flammable Limits: LEL (Lower Explosive Limit) – N/A |
|---|---|
| | UEL (Upper Explosive Limit) – N/A |

**Extinguishing Media:** Suitable extinguishing agents. $CO_2$, extinguishing powder or water spray.

**Special Fire Fighting Procedures:** Fight larger fires with water or alcohol resistant foam. Firefighters should wear protective equipment and self-contained breathing apparatus.

**Unusual Fire and Explosion Hazards:** During heating or in case of fire, poisonous gases are produced.

## Section V – Reactivity Data

| **Stability** | Unstabile | | Conditions to Avoid: No decomposition if used according to specifications. |
|---|---|---|---|
| | Stabile | X | |

**Incompatibility** (*Materials to Avoid*): Strong acids, alkali hydroxides, arsenites, ferrous, mercurous salts, and oxidizing agents.

**Hazardous Decomposition or Byproducts:** N/A

| **Hazardous Polymerization** | May Occur | | Conditions to Avoid: Incompatible materials. |
|---|---|---|---|
| | Will Not Occur | X | |

Product # (s)_8924, 8951

## Section VI – Health Hazard Data

| Route(s) of Entry: | Inhalation? Yes | Skin? Yes | Ingestion? Yes |
|---|---|---|---|

| Health Hazards (Acute and Chronic) | Harmful. Harmful if inhaled or absorbed through skin. Irritating effect to skin, respiratory system, and eyes. |
|---|---|

| Carcinogenicity: NTP? No (National Toxicology Program) | IARC Monographs? No (International Agency for Research in Cancer) | OSHA Regulated? No |
|---|---|---|

**Signs and Symptoms of Exposure:** Severe irritation to eyes, skin, and mucous membranes. May cause burns to all area of contact.

**Medical Conditions Generally Aggravated by Exposure:** Poisonous by inhalation.

| Emergency / First Aid Procedures | Ingestion: If swallowed, seek medical attention immediately. |
|---|---|
| | Inhalation: Supply fresh air or oxygen. Seek medical attention immediately. If not breathing, apply artificial respiration. If breathing is difficult, give oxygen. |
| | Eye Contact: Rinse opened eye for at least 15 minutes under running water. Seek medical attention immediately. |
| | Skin Contact: Remove contaminated clothing immediately. Wash with plenty of soap and water for at least 15 minutes. Seek medical attention. |

## Section VII – Precautions for Safe Handling and Use

**Accidental Release Measures:** Wear suitable protective clothing. Using absorbent material, collect in a suitable container and wash contaminated area with water or detergent.

**Waste Disposal Method:** Dispose in accordance with all applicable federal, state, and local environmental regulations.

**Handling and Storing:** Keep container tightly closed. Store in a cool, dry, well-ventilated, flammable liquid storage area.

**Other Precautions:** Destroy product with 10% Thiosulfite solution or ammonia water (large quantities may react violently). Ensure good ventilation / exhaustion at the workplace.

## Section VIII – Control Measures

**Respiratory Protection (Specify Type):** None required where adequate ventilation conditions exist. If airborne concentration exceeds TLV, a self-contained breathing apparatus is advised.

| Ventilation: | Local Exhaust: 50 – 100 CFM | Special: N/A |
|---|---|---|
| | Mechanical (General): N/A | Other: N/A |

| Protective Gloves: Proper disposable gloves | Eye Protection: Safety goggles |
|---|---|

**Other Protective Clothing or Equipment:** Uniform, lab coat, or disposable lab wear.

**Work / Hygienic Practices:** Follow the usual precautionary measures for handling chemicals / powder. Keep away from food and beverages. Immediately remove all soiled and contaminated clothing. Avoid contact with eyes, skin and clothing.

This document is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. Neogen Corporation shall not be held liable for any damage resulting from handling or from contact with the above product. These suggestions should not be confused with state, municipal or insurance requirements, and constitute NO WARRANTY.