



# MATERIAL SAFETY DATA SHEET

## US – Domestic Only

Section 1. Company Identification and Product Information			
<b>Product Name or Identity:</b>	Agri-Screen® Ticket Pesticide Detectors AT-10 Kit, 10 Samples (8920), AT-25 Kit, 25 Samples (8921) Bulk Tickets and Ampoules (8924), Activator Ampoules (8951, 8956, 8910)		
<b>Manufacturer's Name:</b>	Neogen Corporation	<b>Emergency Phone No.:</b>	517/372-9200
	620 Leshler Place	<b>Fax No.:</b>	517/372-0108
	Lansing, MI 48912	<b>e-mail:</b>	foodsafety@neogen.com
<b>Date Prepared or Revised:</b>	November 2011	<b>Chemtrec: (800) 424-9300</b>	<b>Outside US and Canada: (703) 527-3887</b>

Section 2. Composition / Information on Hazardous Ingredients			
<b>This product is a mixture of the substances listed below with the addition of nonhazardous materials.</b>			
<b>Hazardous Components</b> Specific Chemical Identity:	<b>CAS-No.</b>	<b>% Concentration*</b>	<b>Hazard Symbol</b>
Bromine	7726-95-6	2%	T (Toxic), C (Corrosive)
Water	7732-18-5	98%	N/A

\*All concentrations are percent by weight.

Section 3. Health Hazard Identification	
<b>Health Hazards:</b> (Acute and Chronic)	<b>Information pertaining to particular dangers for man and environment.</b> Skin and eye irritant. May cause burns. Hazardous if ingested or inhaled.

Section 4. First Aid Measures	
<b>Emergency / First Aid Procedures:</b>	<b>Ingestion:</b> DO NOT induce vomiting. If swallowed, seek medical attention immediately. Wash out mouth with water. Show physician product label or MSDS. Never give anything by mouth to an unconscious person. <b>Inhalation:</b> If inhaled, supply fresh air or oxygen at rest. Seek medical attention immediately. If not breathing, apply artificial respiration. If breathing is difficult, oxygen may be necessary. <b>Eye Contact:</b> Immediately rinse opened eye for at least 15 minutes under running water, lifting lower and upper eyelids occasionally. Seek medical attention immediately. Remove contact lenses if able. <b>Skin Contact:</b> Immediately wash with plenty of soap and water for at least 15 minutes while removing contaminated clothing. Seek medical attention. Wash clothing before reuse.

Section 5. Fire and Explosion Hazard Data	
<b>Flash Point (Method Used):</b> Not Applicable	<b>Flammable Limits:</b> LEL – N/A, UEL – N/A
<b>Extinguishing Media:</b> Use water spray, dry powder, or carbon dioxide.	
<b>Protective Equipment:</b> Firefighters should wear full protective equipment and self-contained breathing apparatus.	
<b>Unusual Fire and Explosion Hazards:</b> Not Applicable	
<b>Hazardous Combustion Products:</b> Not Available	

Section 6. Accidental Release Measures	
<b>Personal Precautions:</b> Avoid inhalation of vapors and contact with skin and eyes. Wear suitable protective clothing, gloves, and eye protection. Place contaminated material in a chemical waste container. Avoid prolonged or repeated material.	
<b>Environmental Precautions:</b> Avoid run-off into sewers or waterways.	
<b>Clean-up Methods: Small Spill:</b> Dilute with water and mop up, or absorb with inert dry material. Place in appropriate waste disposal container.	

### Section 7. Handling and Storage

**Handling:** Avoid inhalation of vapors and contact with skin and eyes. Protect against physical damage. Ensure good ventilation / exhaustion. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Do not use if skin is cut or scratched.

**Storage:** Keep container tightly closed in a well-ventilated place. Store in closed original container in a dry place.

### Section 8. Exposure Controls / Personal Protection

**Components with limit values that require monitoring: Bromine (7726-95-6)**

Chemical Name	Source	Type	Exposure Limits
Bromine	US ACGIH TLV	TWA	0.1 ppm
Bromine	US ACGIH TLV	STEL	0.2 ppm

**Engineering Controls:** Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist.

**Respiratory Protection:** Respiratory protection must be used if air contamination exceeds acceptable level. In the US, assure compliance with OSHA Standard 63 CFR 1152, January 8, 1998. Use a NIOSH-approved respirator (See 29 CFR 1910.134, respiratory protection standard).

**Personal Protective Equipment:** Personal Protection listed below are general requirements for laboratory personnel. Follow the usual precautionary measures for handling chemicals / powder. Avoid contact with eyes, skin, and clothing. Proper ventilation required. Safety shower and eye bath required.

Keep away from food, beverages, and feed.

Wash hands before and after entering laboratory.

**Hand Protection:** Use chemical resistant gloves. Be aware that the liquid may penetrate gloves.

**Eye Protection:** Wear approved safety goggles.

**Body Protection:** Wear lab coat or other protective work clothing that is chemical resistant.

**Environmental Exposure Controls:** Environmental manager must be informed of all major spillages.

### Section 9. Physical and Chemical Properties

<b>Appearance and Odor:</b> Amber liquid, characteristic Bromine odor.	<b>Evaporation Rate:</b> Data not available.
<b>Boiling Point:</b> Data not available.	<b>Vapor Pressure:</b> Data not available.
<b>Melting Point:</b> Data not available.	<b>Vapor Density (Air=1):</b> Data not available.
<b>Solubility in Water:</b> Completely soluble	<b>Viscosity:</b> Data not available.

### Section 10. Stability and Reactivity

<b>Stability:</b>	Unstable		
	Stable	X	Stable under normal temperature conditions.
<b>Incompatibility (Materials to Avoid):</b> Incompatible with reducing agents, oxidizing agents, and organic materials.			
<b>Hazardous Decomposition or Byproducts:</b> Bromine, at elevated temperatures.			
<b>Hazardous Polymerization:</b>	May Occur		Conditions to Avoid: Incompatible materials.
	Will Not Occur	X	

### Section 11. Toxicological Information

**LD/LC<sub>50</sub> values that are relevant: Bromine (7726-95-6)**

**LD<sub>50</sub>:** Oral-Rat, 1700 mg/kg

**LC<sub>50</sub>:** Inhalation-Rat, 2700 mg/m<sup>3</sup>

**Carcinogenicity Classification:** Not listed as a carcinogen

**IARC (International Agency for Research on Cancer) – Not Listed**

**NTP (National Toxicology Program) - Not Listed**



**Eye:** Produces eye irritation. Exposed individuals may experience eye tearing, redness, and discomfort.  
**Ingestion:** May cause gastrointestinal irritation with nausea, vomiting, and diarrhea.  
**Inhalation:** Harmful if inhaled in high concentrations; may cause respiratory distress.  
**Skin:** Causes skin irritation, chronic exposure may produce burns.  
**Chronic:** Repeated or prolonged exposure may cause burns.

#### Section 12. Ecological Information

**Ecotoxicity Tests:** This product contains a substance which is toxic to aquatic organisms.  
**Bromine:** LC<sub>50</sub> - Fish, 0.31 mg/L, 24 hours.

#### Section 13. Disposal Considerations

**Waste Disposal Method:** Dispose in accordance with all applicable federal (40 CFR 261.3), state, and local environmental regulations.  
**RCRA P-Series:** None listed.  
**RCRA U-Series:** None listed.  
**Container Information:** Do not remove labels from containers until they have been cleaned.

#### Section 14. Transport Information

**DOT Regulations:**  
UN No. UN 1744  
Proper Shipping name: Bromine Solution, 2%  
Class: 8  
Packing Group: I  
Remarks: Excepted / Small quantity (30 mL) citation 49 CFR 173.4

#### Section 15. Regulatory Information

**US Regulations:** CERCLA Hazardous Substance List (40 CFR 302.4): Not regulated.

##### SARA Title III

##### Section 302 Extremely Hazardous Substances (40 CFR 355, Appendix A):

**Chemical Name:** Bromine. **Regulated Quantity:** 500lbs.

##### **Section 311/312 (40 CFR 370):**

Acute (Immediate),  Chronic (Delayed)

##### Section 313 Toxic Release Inventory (40 CFR 372):

Bromine 7726-95-6 - Reporting threshold others: 10,000 lbs. Reporting threshold manufacturing/processing: 25,000 lbs.

**Clean Air Act (CAA) Section 112 (r) Accidental Release Prevention (40 CFR 68.130):** Bromine

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3):** Not regulated.

**Drug Enforcement Act:** Not regulated.

**OSHA:** Hazardous by definition of Hazardous Communication Standard (29 CFR 1910.1200)

**TSCA**

**TSCA Section 4(a) Final Test Rules & Testing Consent Orders:** Not regulated.

**TSCA Section 5(a)(2) Final Significant New Use Rules (SNURs) (40CFR 721, Subpt. E):** Not regulated.

**TSCA Section 5(e) PMN- Substance Consent Orders:** Not regulated.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D):** Not regulated.

**State Regulations**

**California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):** Not regulated.

**Connecticut Hazardous Material Survey:** Bromine

**Illinois Chemical Safety Act:** Bromine

**Massachusetts Right-To-Know List:** Bromine

**Michigan Critical Materials List (Michigan Natural Resources and Environmental Protection Act (Act 451 of 1994):**  
Not regulated.

**Minnesota Hazardous Substances List:** Bromine

**New Jersey Right-To-Know:** Bromine

**New York Release Reporting List:** Bromine

**Pennsylvania Right-To-Know:** Bromine

**Rhode Island Right-To-Know:** Bromine

**Section 16. Other Information****NFPA**

Health Hazard: 2

Fire Hazard: 0

Instability Hazard: 0

Special Hazard: 0

**HMS**

Health Hazard: 1

Flammability: 0

Physical Hazard: 0

Personal Protection: B (Safety Glasses, Gloves)

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.