

## Pesticide Residues

### Agri-Screen Ticket®



#### Intended Use

Agri-Screen Ticket is used to detect all major organophosphates, thiophosphates and carbamates in air, water, soil, produce, food, spills, surfaces and custom applications. Among the common pesticides that Ticket detects are: Malathion®, Sevin®, Furadan®, Systox®, Vapona®, Phosdrin®, Metasystox®, Guthion®, Actellic®, Dursban® and diazinon. For a complete list, contact Neogen. Samples can be tested wet, dry, or with solvents.

#### The Test

Ticket is based on a simple biochemical principal. One side of Ticket has a disc saturated with cholinesterase, an enzyme in most living organisms, except plants, which controls muscle performance. If the enzyme is altered or dies, so does the organism. Pesticides can inhibit an organism's ability to produce cholinesterase, and therefore, kill the organism. If enough pesticide is present in the sample, it will inactivate the cholinesterase enzyme and no reaction will occur, leaving the disc white. If no pesticide is present, the enzyme will create a blue color, indicating a negative result for the presence of pesticides.

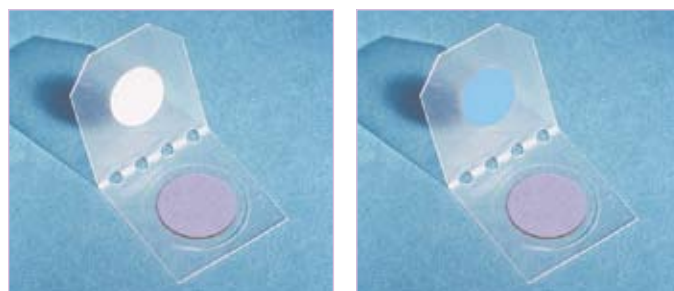
#### The Procedure

Extraction procedures for water, soil, grains and produce, and air samples vary slightly. Contact Neogen for specific extraction procedures for specific sample types. There are additional, alternate methods of using Ticket in a laboratory setting. All Ticket test procedures are similar to the following example, using water as the sample:

1. COLLECT: Place 20 mL of sample in 50 mL beaker provided with kit. (With some methods, extraction is necessary.)
2. CONVERT: Place activator ampule in the 20 mL of sample and crush with glass rod. Allow to react for 3 minutes.
3. EXPOSE: Remove Ticket from packet. Expose white disc only, and dip into beaker for 1 minute.
4. DEVELOP: Remove Ticket from beaker, and expose second disc. Fold Ticket and press discs together for 3 minutes.
5. READ RESULTS: Open Ticket and read results immediately. White means pesticides were detected, and blue indicates they were not.

See package insert for complete instructions

#### Results



Positive

Negative

#### Each Ticket Pesticide Detection Kit Contains:

1. Pesticide detector Tickets
2. Activator ampules
3. 50 mL graduated beaker
4. Glass rod for breaking the activator ampules and stirring the sample
5. Instructions for use

#### Uses for Agri-Screen Ticket

- Municipal water supplies
- Runoff and groundwater monitoring
- Livestock water monitoring
- Drift
- Human exposure monitoring
- Workers badge
- Worker reentry
- Environmental monitoring
- Filter systems
- Field screening
- Processed fruits, vegetables and nuts
- Processed wines and juices
- Poultry and livestock feed
- Pesticide identification
- Personnel and environmental safety
- Poison control
- Cleanup monitoring
- Food storage areas
- Nurseries and greenhouses
- Pesticide-contaminated disposal
- Milling and baking diagnostics
- Pesticide coverage
- Pesticide effectiveness (efficacy)
- Grain terminal monitoring
- Lab pre-screening
- Treated material

#### Ordering Information

Prod.#	Product description
8920	AT-10 Kit - 10 samples
8921	AT-25 Kit - 25 samples
8924	Bulk Tickets and Ampules - 10 each
8953	Concentrator
8954	50 mL beaker
8955	Glass rod