

## **Intended Use:**

ChemoTest is intended to validate the technique of health care workers who manipulate hazardous drugs. The directions for use are designed to simulate frequently performed procedures where antineoplastic and other hazardous drugs are compounded, sterilized, reconstituted, mixed, transferred, and prepared for administration. ChemoTest is NOT intended to validate aseptic technique.

## **Materials Supplied in ChemoTest Kit:**

- 1 EACH 50 mL vial with powdered Fluorescein dye, non-sterile
- 1 EACH 3 mL VIAL with Fluorescein dye solution, non-sterile
- 1 LOG SHEET

Store at 2 to 25° C, out of direct sunlight, until ready to use.

## **Materials Supplied by User:**

- UV LIGHT (ChemoTest #CT9000 or equivalent)
- EMPTY FLEXIBLE CONTAINER (MINIBAG), 50 TO 250 ML CAPACITY
- DILUENT (NS, D5W, OR SWI)
- LUER LOCK SYRINGES
- APPROPRIATELY SIZED NEEDLES
- CLOSED-SYSTEM DRUG TRANSFER DEVICES (OPTIONAL)
- NEEDLE -LESS SYSTEMS (OPTIONAL)
- IV ADMINISTRATION SET (OPTIONAL)
- GLOVES, MATS, GOWNS, DISINFECTANTS, WASTE CONTAINERS, OTHER PROTECTIVE SUPPLIES

## **Caution:**

Ultraviolet light may be harmful to eyes and unprotected skin. Do not shine the UV light into eyes or for prolonged periods onto skin. TURN OFF ambient lights in work area when using the UV Light, ChemoTest #CT9000.

## **Test Procedure:**

The following directions should be modified to reflect the training, written procedures, equipment, supplies, and housekeeping policies unique to each facility.

1. This procedure is one of the more complex of those the operator will be expected to perform. It consists of:
  - (a) reconstituting a powder in a 50 mL vial and transferring the liquid contents to a small flexible container,
  - (b) transferring the contents of a 3 mL vial to a flexible container, and
  - (c) priming a typical IV administration set.
2. Prepare and arrange all supplies in the Biological Safety Cabinet (BSC) or area used for manipulating hazardous drugs.
3. Sanitize work area using standard procedures. Swab vials, bag, and ports according to standard procedures.
4. Before proceeding, the test supervisor should carefully shine the UV light on all work surfaces, supplies, mats, gloves, and gown. Any materials or spots that exhibit fluorescence should be removed or noted in the test log. This is to prevent them from being counted later as accidental spills or aerosolization of the Fluorescein dye.
5. Using standard procedures and supplies, reconstitute the Fluorescein dye powder in the 50 mL vial.
6. Transfer the Fluorescein solution to the flexible container. Retain the flexible container.
7. Transfer the Fluorescein dye solution in the 3 mL vial to the flexible container.
8. Optional - Spike the flexible container with the IV administration set. Using standard procedures, prime the set.
9. At this point, the test supervisor carefully shines the UV light on the work surfaces and sides of the BSC, mat, used containers, IV administration set, gloves, and gown. Record the number and size of Fluorescein spots in the log.

## **Hazmat Cleanup Testing:**

Save the bag of Fluorescein dye solution for future hazardous material cleanup testing. Create a hole in the bag and "Spill" the solution in the work area to simulate a hazardous material accident. After the appropriate cleanup procedures are completed, shine the UV light on the spill area to evaluate effectiveness of the cleanup.

