

instructions

YOUR MSA BITREX QUALITATIVE FIT TEST KIT INCLUDES:

1. Test hood
2. Nebulizer #1 (sensitivity)
3. Nebulizer #2 (fit test)
4. Sensitivity Solution
5. Fit Test Solution
6. Two sets of replacement nebulizer inserts

PREPARATION

1. Connect snaps at the top of the hood, so that the connections help to support itself.
2. Remove an applicator tube of Sensitivity Test solution from its storage box. With the fill tip pointed upward, pinch along the full length of the applicator tube using your thumb and forefinger until glass ampoule inside of the applicator tube is thoroughly crushed.

WARNING

It is important to keep the applicator tip pointed upward when pinching the tube. This is to prevent the solution from squirting out during the pinching process.

3. Remove the stopper from the nebulizer labeled "No. 1 - Sensitivity Test Solution". Insert the tip of the applicator tube into the opening of the nebulizer. Squeeze along the applicator tube to transfer the solution from the applicator down into the nebulizer until the applicator is completely drained of the solution.

WARNING

Do not attempt to remove the tip of the applicator. It contains a porous filter which is designed to allow the solution to pass through it while filtering out the

glass ampoule particles. It is also not necessary to puncture a hole or cut the tip of the applicator. The applicator tip already has the proper hole size in it to allow the solution to squirt into the nebulizer. See diagram on back.

NOTE

It is recommended that the protective stopper be replaced back on the nebulizer until the test is ready to be performed.

4. Repeat steps 2 and 3 using an applicator tube of Fit Test Solution and the nebulizer labeled "No. 2 - Fit Test Solution."
5. Once the applicator solutions have been drained into the nebulizers, the applicator tubes can be safely disposed.

SENSITIVITY TEST

This test is conducted to assure that the person being fit tested can detect the taste of the Bitrex solution at very low levels. The sensitivity test solution is a 100 to 1 dilution of the fit test solution.

The test subject should not eat, drink, or chew gum for at least 15 minutes before the test.

1. Explain the fit test procedures to the subject.
2. Have the subject don the hood without a respirator.
3. Position the hood forward so there is about six inches between the subjects face and the hood. This is especially important for the fit test, it helps to ensure even dispersion of the aerosol and allows free movement of the subjects head while wearing a respirator.
4. Instruct the subject to breath through their mouth.

5. Using the sensitivity test solution nebulizer #1, inject the aerosol into the hood through the hole in the hood. Inject ten squeezes of the bulb, fully collapsing and allowing the bulb to expand fully on each squeeze.
6. Ask the subject if they can detect the taste of the Bitrex aerosol. If tasted note the number of squeezes and proceed to the fit test.
7. If the subject does not taste the sensitivity solution, inject an additional 10 full squeezes of the aerosol into the hood. Repeat with 10 more squeezes of the aerosol into the hood if still not tasted.
8. If 30 squeezes of the nebulizer were inadequate to produce a response from the subject, the test should be ended and another type of fit test must be used.
9. Remove the hood and give the subject a few minutes to clear the taste from their mouth.

FIT TEST

1. Have the test subject don and fit check the respirator per the instructions provided with the respirator.

NOTE

The fit test is to be performed with the test subject wearing a respirator with a particulate filter or prefilter.

2. Have the test subject don and position the hood as before, and to breath through their mouth.
3. Using the fit test nebulizer #2, inject the fit test aerosol through the hole in the hood using the same number of full bulb squeezes as required in the sensitivity test, ie. 10, 20, or 30 squeezes.
4. To maintain an adequate concentration of aerosol during this test, inject one-half of the number of squeezes used in step #3 above, every 30 seconds.



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5. Instruct the subject to indicate if they detect the taste of Bitrex aerosol at any time during the test.
6. After the initial aerosol is injected (step 3), instruct the test subject to perform the following exercises for 60 seconds each:
 - a. Normal breathing
 - b. Deep breathing - breaths should be deep and regular.
 - c. Turning head from side to side-movement should be complete with one turn every second.
 - d. Nodding head up and down-movement should be complete and made about once per second.
 - e. Talking, reciting the alphabet or reading aloud the "Rainbow Passage" (see below).
 - f. Jog in place.
 - g. Normal breathing.
7. If the entire test is completed without the subject detecting the taste of the Bitrex aerosol, the test is successful and the respirator fit is deemed adequate.
8. If the test subject does detect the taste of the Bitrex aerosol, terminate the test, (this indicates an inadequate fit). Wait 15 minutes and perform the tests over, starting with the sensitivity test. Fit test protocol meets 29 CFR Part 1910.134.

CLEANING/REFILLING

Immediately after completing the test, safely dispose of unused solution. Rinse the nebulizers with warm water to prevent clogging. Wipe out the inside of the hood with a damp cloth or paper towel to remove any deposited Test Solution. The Nebulizers must be thoroughly rinsed in water, shaken dry and refilled at least each morning and afternoon or at least every (4) four hours.

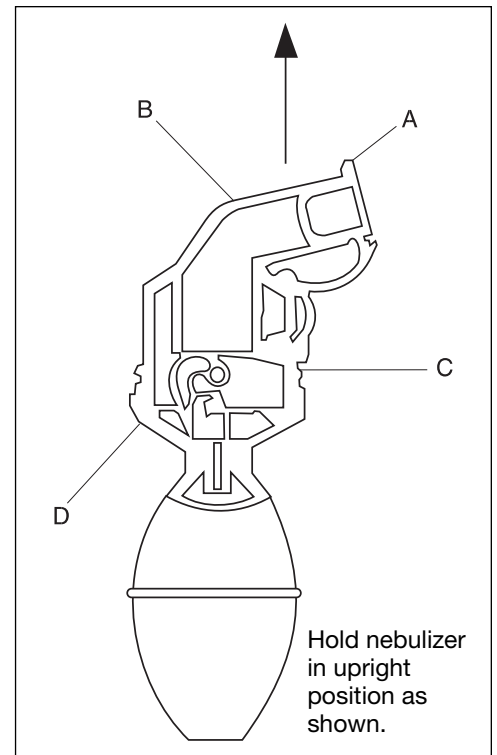
OSHA

The MSA qualitative fit test kit meets the performance criteria for fit testing respirators under the current OSHA standards.

OPERATING INSTRUCTIONS FOR NEBULIZER

1. Remove stopper (A) from vapor tube (B) holding in horizontal position. Add solution through vapor tube (B). Do not fill above O-Ring (D). Overfilling will cause nebulizer to leak.
2. Remove stopper (C) for maximum aerosol delivery. Do not close stopper during test. You must hold nebulizer in upright position (as shown in picture) for it to function properly.

Replacement Parts	
Part Number	Description
697445	Sensitivity Solution
697446	Test Solution
697447	Nebulizer, Sensitivity Test Solution
697448	Test Hood
697449	Training Video
697459	Nebulizer, Fit Test Solution



"THE RAINBOW PASSAGE"

WHEN THE SUNLIGHT STRIKES RAINDROPS IN THE AIR, THEY ACT LIKE A PRISM AND FORM A RAINBOW. THE RAINBOW IS A DIVISION OF WHITE LIGHT INTO MANY BEAUTIFUL COLORS. THESE TAKE THE SHAPE OF A LONG ROUND ARCH, WITH ITS PATH HIGH ABOVE, AND ITS TWO ENDS APPARENTLY BEYOND THE HORIZON. THERE IS, ACCORDING TO LEGEND, A BOILING POT OF GOLD AT ONE END. PEOPLE LOOK, BUT NO ONE EVER FINDS IT. WHEN A MAN LOOKS FOR SOMETHING BEYOND HIS REACH, HIS FRIENDS SAY HE IS LOOKING FOR THE POT OF GOLD AT THE END OF THE RAINBOW.