

### **Products include:**

> VeriFit® Irritant Smoke **Generators for Respirator** Fit Testing

VeriFit® Aerosol Generator Kit Birtrex® or Saccharin

Nextteq® Irritant Smoke **Tube Test Kit** 

Nextteg® Non-Irritant AirFlow Test Kit



### First All-in-One Irritant Smoke Generator for Respirator Fit Testing

The VeriFit® Irritant Smoke Generator revolutionizes respirator fit testing. Its patented plastic design integrates all traditional fit testing kit components into one convenient device. The small bellows size provides the optimum amount of smoke for fit testing yet minimizes the risk of overexposure.

Unlike other test methods, there is no need for chamber construction, nebulizers, electric pumps, mixing jars, batteries, special test masks, mask probes, or testing hoods. There are also no parts to calibrate, warm up, sterilize, or clean.

The VeriFit® Irritant Smoke Generator comes ready to use. Everything you need for immediate qualitative fit testing is in one sleek, safe, and convenient smoke generator.

#### Simulates Real Working Conditions Reduces Health Risk

Irritant smoke fit testing simulates real working conditions. At no time are test subjects required to hold their breath after vigorous exercise, a potentially stressful condition that could be detrimental to the test subject's health. Also, there are no test hoods. Test subjects are allowed to breathe normally throughout the entire test.

### Eliminates Danger from Broken Glass Increases Safety

The VeriFit® Irritant Smoke Generator's plastic construction is a safer alternative than traditional irritant smoke test kits. Traditional kits use glass tubes that must be broken to elicit smoke. The broken glass can become hazardous to handle and discard.

To use a VeriFit® Irritant Smoke Generator, simply bend the plastic tube to break the enclosed ampoule. Because the ampoule is inside the tube, there is no danger of exposure to broken glass. As a result, the VeriFit® Irritant Smoke Generator is safer to operate and discard.

## Incorporates All-In-One Design Ready to Use

The VeriFit® Irritant Smoke Generator's patented all-in-one design saves you prep and clean-up time. There are no parts to warm up, calibrate, clean, or sterilize. The VeriFit® Irritant Smoke Generator is always ready to use.

All aspects of a traditional irritant smoke fit test kit are incorporated into one handy device. The bellows and ampoule are conveniently integrated into a sleek smoke generator. Unlike traditional smoke test kits, there are no additional components to attach, lose, or replace.

### Generates Precise Smoke Volume Every Time Minimizes Risk of Overexposure

The VeriFit® Irritant Smoke Generator's bellows produce a precise volume of air with each complete compression. There is no user calibration or complex, error-prone flow rate to set. Because you control the compressions, you control the amount of smoke generated. Manual operation ensures greater safety and precision.

The risk of overexposure to smoke is also minimized due to the small bellows size. The VeriFit® Irritant Smoke Generator is a safer option than traditional irritant smoke test kits that can have less precise smoke measurements and greater smoke production.

Irritant smoke is the only OSHA-accepted qualitative fit testing method that relies on the test subject's involuntary response. It does not rely upon test subject's sense of smell or taste.

Qualitative fit tests such as banana oil (isoamyl acetate), saccharin, or Bitrex may cause false negative results.

A common cause of false negative results is the failure of a test subject to identify a leak in the respirator.

Many factors cause test subjects to not notice a leak:

- Olfactory fatigue (reduction in ability to smell)
- Gustatory fatigue (reduction in ability to taste)
- Allergy or common cold
- Ingestion of food or drink
- Reduced sense of smell or taste due to aging, smoking, or other causes

## **VeriFit®** Irritant Smoke Generators for Respirator Fit Testing

# Each package of VeriFit® Irritant Smoke Generators includes the following:

- Smoke Generators (each a complete fit testing kit)
- One (1) Comprehensive Manual



Actual Size



At 5 inches long with a 1 inch diameter, each VeriFit® Irritant Smoke Generator has a compact shape that is easily handled and stored. The box-sized package contains 10 or 6 complete smoke generators and manual, yet conveniently fits in a desk drawer or stands on a bookshelf.

## Field-proven as an OSHA-accepted respirator fit testing method since 1982.

Irritant smoke qualitative respirator fit testing is an economical, fast, safe, and reliable fit testing method. Irritant smoke is used for testing a wide variety of respirators by firefighters, HazMat teams, first responders, the U.S. military, and countless industrial users. VeriFit® Irritant Smoke Generators are designed to meet and be used in accordance with OSHA 29 CRF 1910.134.

### Ready to use in 3 simple steps!



1. Bend the smoke generator to break the enclosed ampoule.



2. Remove cap.



**3.** Wait 5 seconds and compress bellows.

### When to Conduct a Respirator Fit Test

OSHA 29 CFR 1910.134 requires that an employee using a tight-fitting facepiece respirator be fit tested at the following times:

- 1. Prior to initial use of the respirator.
- 2. Whenever a different respirator facepiece (size, style, model, or make) is used.
- 3. At least annually.

An additional fit test is required whenever the following occurs:

- 1. The employee reports changes in his/her physical condition\* that could affect respirator fit.
- The employer, PLHCP (physician or other licensed health care professional), supervisor, or program administrator makes visual observations of changes in the employee's physical condition\* that could affect respirator fit.





Compare Qualitative Fit Testing Methods	Irritant Smoke Stannic Chloride	Banana Oil  Isoamyl Acetate	Saccharin  Solution Aerosol	Bitrex  Denatonium Benzoate
RELIABLE involuntary response if respirator leaks	Yes	No	No	No
ELIMINATES false negatives caused by olfactory or gustatory fatigue, loss of sense of smell or taste due to age or illness	Yes	No	No	No
ELIMINATES time spent preparing sensitivity test mixtures	Yes	No	No	No
ELIMINATES extra cost of nebulizers, pumps, hoods, and test mixing apparatus	Yes	No	No	No
ELIMINATES time and cost of chamber construction, pump and nebulizer calibration, charging a battery, test mask and probe sterilization, and clogged nebulizer cleaning	Yes	No	No	No
Test subject may eat, drink, chew gum, or smoke before test and not void test results	Yes	Yes	No	No
ELIMINATES cost of 2 nebulizers and time spent cleaning nebulizer every 4 hours	Yes	No	No	No

### Respirators That May Be Qualitatively Fit Tested With Irritant Smoke\*

RESPIRATOR TYPE	OSHA Accepted for Irritant Smoke Fit Test
HALF FACE MASK - negative pressure, APR (100 fit factor)	Yes
FULL FACE MASK - negative pressure, APR (100 fit factor) used in atmospheres up to 10 times the PEL	Yes
POWERED AIR PURIFYING RESPIRATOR (PAPR)-tight fitting	Yes
SUPPLIED - AIR RESPIRATOR (SAR) - used in positive pressure (pressure demand mode); IDLH atmospheres	Yes
SELF-CONTAINED BREATHING APPARATUS (SCBA) - used in positive pressure (pressure demand mode); structural firefighting; IDLH atmospheres	Yes
DISPOSABLE PARTICULATE RESPIRATORS (N100) - Filters at least 99.7% of airborne particles. Not resistant to oil. (R100) - Filters at least 99.7% of airborne particles. Somewhat resistant to oil. (P100) - Filters at least 99.7% of airborne particles. Strongly resistant to oil.	Yes
MOUTH BIT RESPIRATORS	Fit Testing Not Required
LOOSE FITTING RESPIRATORS - e.g. hoods, helmets	Fit Testing Not Required

 $<sup>^{\</sup>star} \ \text{Adapted from OSHA Compliance Directive, CPL 2.120 Inspection Procedures for the Respiratory Protection Standard, Sept. 18, 1998.}\\$ 

### **Ordering Information**

P/N	DESCRIPTION	
50811000-310N	VeriFit® Irritant Smoke Generators for Respirator Fit Testing Each package includes the following:  • Ten (10) Smoke Generators (Each a Complete Fit Testing Kit)  • One (1) Durable Storage Box  • One (1) Comprehensive Manual	
90095	VeriFit® Irritant Smoke Generators for Respirator Fit Testing Each package includes the following:  • Six (6) Smoke Generators (Each a Complete Fit Testing Kit)  • One (1) Durable Storage Box  • One (1) Comprehensive Manual	





