



## SULFUR DIOXIDE SCRUBBER FOR THE INTERSCAN PROFUME<sup>®</sup> MONITOR

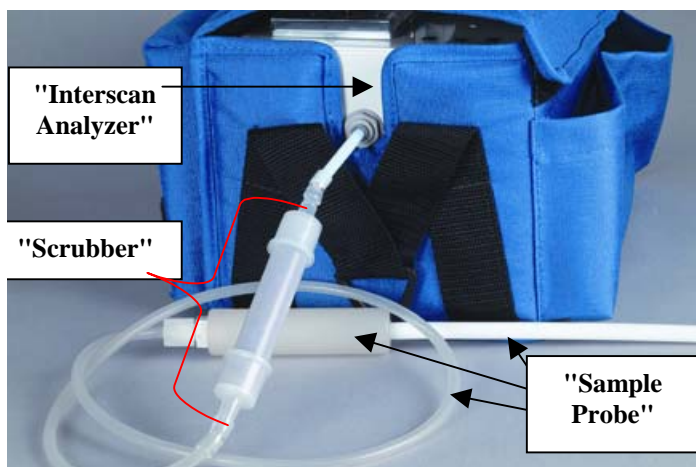
### BACKGROUND

A scrubber was developed to remove ambient sulfur dioxide (SO<sub>2</sub>) from air samples. This scrubber **must** be used any time the operator uses Profume<sup>®</sup>. SO<sub>2</sub> is used as a preservative in many food products such as dried fruits (raisins, figs, walnuts, etc.).

The InterScan Monitoring Instrument for ProFume<sup>®</sup> gas fumigant utilizes a special pyrolyzer (furnace), which converts Profume<sup>®</sup> (SO<sub>2</sub>F<sub>2</sub>) to SO<sub>2</sub>. The sensor in the InterScan monitor measures SO<sub>2</sub> then displays readings on a scale of 0-50 parts per million (PPM).

Certain applications exist in which SO<sub>2</sub> concentrations would affect the instrument's ability to correctly measure Profume. SO<sub>2</sub> in the sampling area would be added to the SO<sub>2</sub> produced in the pyrolyzer, resulting in an erroneously high reading for the fumigant concentration.

### METHOD OF USE



1. Creating the Sample probe assembly (*P/N 030-00047*) is performed by installing the scrubber (*P/N 030-00046*) between the sampling probe (*P/N 050-00003*) and the inlet of the instrument (*GF1900*).

2. The scrubber should be checked before each use. If most of the pellets inside the tube have turned brown, from their original purple color, it is time to change the scrubber chemical (PURAFIL<sup>®</sup>). To do this, open the scrubber tube at one end, and pour out the used Purafil<sup>®</sup> into a double plastic bag. **Take care not to lose the screen and retainer!** *Small amounts of Purafil<sup>®</sup> can be disposed of in your normal trash.* Then, pour in new Purafil<sup>®</sup> (available in bulk **P/N 030-00043**), and re-assemble the scrubber tube.
3. Power up the instrument using proper operating procedures (with AC power supply or battery pack).
4. The instrument **MUST** be calibrated with the scrubber installed. See steps below:





### **Calibration Procedure**

Small sample cylinders containing known concentrations of sulfuryl fluoride with air (~40 PPM) are available for calibration purposes. Specially designed plastic sample bags are used to introduce the gas/air mixture to the Interscan. The instrument can then be adjusted to accurately measure the known concentration. This method is ideally suited for quick, easy and reliable calibration of the Interscan, as well as confirmation of accuracy in the field. Sample cylinders and bags are available from:

Scott-Marrin, Inc.  
6531 Box Springs Blvd.  
Riverside, CA 92507-0725  
(909) 653-6780

1. Warm up and "zero" analyzer.
2. Attach regulator to calibration cylinder and tighten with a wrench, (note - left hand thread).
3. Close outlet valve and back out regulator hand wheel (turn to left).
4. Open cylinder valve approximately 1/2 turn.
5. Turn regulator valve clockwise until outlet pressure gauge reads 3-5 psi.
6. Close cylinder valve and open regulator valve to bleed regulator.
7. Repeat steps 3 - 5.
8. Attach sample bag to regulator outlet and slowly open outlet valve to fill bag approx. 90 percent full (do not overfill as bag will burst).
9. Disconnect sample bag from regulator and connect to analyzer.
10. Wait 2-3 minutes and then adjust the meter to the gas concentration with the SPAN adjust.
11. Remove the bag and allow the meter to return to zero. If it does not return to zero, re-zero it and re-calibrate.

## ORDERING INFORMATION

DESCRIPTION	CATALOG #	IMAGE
Sample probe with tubing	050-00003	
Purafil® scrubber tube (10 cm)	030-00046	
Special sample probe with Purafil® tube in-line	030-00047	
1 pound of Purafil® in bulk, supplied in sealed bag	030-00043	

## FOR FURTHER DETAILS, PLEASE CONTACT

Interscan Corporation  
4590 Ish Dr., #110  
Simi Valley, CA 93063

1 800 458-6153

FAX (818) 341-0642

Websites [www.gasdetection.com](http://www.gasdetection.com) [www.vikanemonitor.com](http://www.vikanemonitor.com)

e-mail [service@gasdetection.com](mailto:service@gasdetection.com)