



## Operating Instructions

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### Dual Stainless Steel Fitted Bags 231 Series Sample Bags

The 231 Series sample bags feature dual stainless steel fittings – an inlet valve for flushing and filling and a septum fitting for removing samples.

#### Guidelines for Bag Sampling

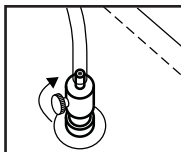
1. Ensure that the bag material and fittings are appropriate for the compounds to be sampled.
2. Use only PTFE tubing to connect the sample bag to the pump to prevent sample loss by adsorption on tubing walls.
3. Before using, flush the bag thoroughly with purified air or nitrogen.
4. Analyze the sample within 24 to 48 hours. Long-term storage of air-contaminant mixtures in bags is not recommended.
5. Do not ship sample bags by air unless the cargo cabin is pressurized.

#### Notes and Cautions

- **Maximum Operating Temperature** — Do not exceed 225 F (107 C) due to fitting O-ring temperature rating
- Do not use sample bags to sample compounds with boiling points > 249.8 F (121 C).
- SKC sample bags are designed for sampling air at atmospheric pressure only. Attempting to pressurize the bag can result in bag rupture and sample loss. Do not ship bag samples by air freight in a non-pressurized cargo cabin. Bags can burst under such conditions.
- All federal and state packaging and transporting regulations apply.
- SKC bag fitting valves are extremely durable but are not intended for use as handles or hanging devices. This type of handling may damage the seal, causing leakage. This is considered to be misuse and will void the SKC warranty.
- Failure to follow warnings and cautions voids any warranty.
- Sample bags are designed for single use only.

## Operation

1. Flush the bag at least 3 times with purified air or nitrogen before use.
2. To fill the bag, connect PTFE tubing from the exhaust port of an air sample pump to the hose connection on the bag (stem protruding from the top of the inlet fitting).



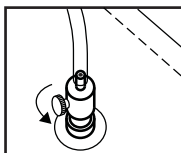
3. Ensure that the valve is locked open by tightening the knurled thumbscrew clockwise until snug. Turn on the sample pump to fill the bag (*see Proper Bag Inflation*).



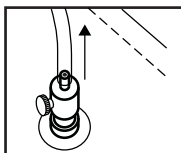
**Do not sample compounds that exceed the 225 F (107.2 C) temperature rating of the fitting O-rings.**



**Do not use sample bags to sample compounds with boiling points > 249.8 F (121 C).**



4. When sampling is complete, turn off the pump and loosen (turn counterclockwise) the knurled thumbscrew a maximum of 2 revolutions.



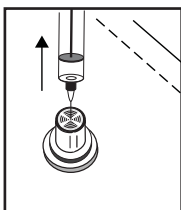
5. Close the shut-off valve by pulling up on the valve stem. (**Note:** Ensure the PTFE tubing is not pulled off while pulling up on the valve stem.) Tighten the knurled thumbscrew until snug to lock the valve closed.



**The outside diameter of the syringe needle should not be larger than 22 gauge (0.028 inch).**



**Do not allow the syringe needle to puncture the bag material when piercing the septum.**

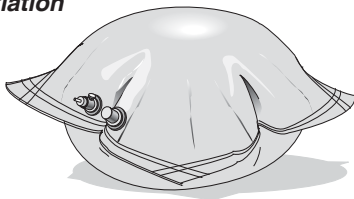


6. To withdraw samples using a needle and syringe, carefully insert the needle into the port in the septum fitting and pierce the septum.

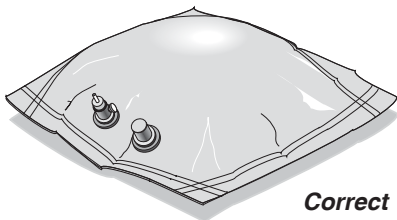
## Proper Bag Inflation

Avoid filling any bag more than 80% of its maximum volume. At the end of the sampling period, turn the pump off and close the valve on the bag. Tighten the knurled thumbscrew to lock the valve closed.

***Incorrect  
Inflation***



***Correct  
Inflation***



SKC sample bags are available in Tedlar®, FlexFoil® PLUS, and Standard FlexFoil with fittings made of stainless steel, polypropylene, or PTFE in sizes ranging from 0.5 to 100 liters. SKC also manufactures custom sample bags. Contact SKC at 724-941-9701 or [skcorder@skcinc.com](mailto:skcorder@skcinc.com) or go to [www.skcinc.com/media/documents/85177.pdf](http://www.skcinc.com/media/documents/85177.pdf).

*For sample bag stability reports, visit  
[www.skcinc.com/media/documents/1805.pdf](http://www.skcinc.com/media/documents/1805.pdf).*

**Accessories**

**Replacement Septa**, pk/10.....Cat. No. 231-9-04

**PTFE Tubing**, fits over all SKC bag fittings, Grab Air pump exhaust,  
and into Pocket Pump TOUCH Quick-connect Adapter  
3/16-inch (4.76-mm) ID, 1/4-inch (6.35-mm) OD .....10 feet.....Cat. No. 231-9-23

**PTFE Tubing**, fits inside bag fitting,  
1/16-inch (1.59-mm) ID, 1/8-inch (3.18-mm) OD .....10 feet.....Cat. No. 231-9-21

**PTFE Tubing**, fits Vac-U-Chamber sample inlet port,  
1/4-inch (6.35-mm) ID, 5/16-inch (7.94-mm) OD .....10 feet.....Cat. No. 231-937  
50 feet.....Cat. No. 231-924

**SKC Limited Warranty and Return Policy**

SKC products are subject to the SKC Limited Warranty and Return Policy, which provides SKC’s sole liability and the buyer’s exclusive remedy. To view the complete SKC Limited Warranty and Return Policy, go to [skcinc.com/warranty](http://skcinc.com/warranty).