

### **Bag Sampling**

Air sample bags are a convenient and accurate means of collecting airborne chemical hazards. This is particularly true in areas where the concentration is above the detection limits of common analytical instruments. Typical bag sampling applications include:

- Measuring peak concentrations from various processes, emissions, or worker tasks.
- Taking samples where leaks, spills, or other potentially hazardous events have occurred and analysis is needed quickly so that appropriate controls can be implemented.

For an application guide on using sample bags, go to the Sampling Help button at www. skcinc.com.

# **The Flexible System**

Tedlar with Dual Stainless Steel Fittings

These flexible system sample bags feature two stainless steel fittings: the hose/valve for flushing, filling, and sealing the bag and the septum with a syringe port for removing samples for analysis. The fittings are easy to use and provide sampling flexibility and reliability.

Internal Size-cm† (in)	Maximum Capacity	Cat. No.	Qty.
17.7 x 17.7 (7 x 7)	1 litre	231-01	10
		231-01A	ea
<b>24.1 x 25.4</b> (9.5 x 10)	3 litre	231-03	10
<b>30.4 x 31.7</b> (12 x 12.5)	5 litre	231-05	10
		231-05A	ea
<b>29.8 x 55.9</b> (11.75 x 22)	10 litre	231-08	10
		231-08A	ea
<b>33 x 61</b> (13 x 24)	12 litre	231-10	10
<b>44.4 x 61</b> (17.5 x 24)	25 litre	231-15	5
<b>61 x 61.6</b> (24 x 24.25)	40 litre	231-20	5
<b>71.7 x 82.6</b> (28.25 x 32.5)	80 litre	231-30	5
<b>71.1 x 91.4</b> (28 x 36)	100 litre	231-50	3
Replacement Septums		231-9-04	10



## For EPA TCLP Method

### Tedlar with Single Stainless Steel Septum Fitting

Designed for use with a Zero Headspace Extractor (ZHE), the TCLP sample bag is a disposable 1-litre bag with a single stainless steel septum fitting. The bag attaches directly to a ZHE with a special stainless steel adapter (required).



100	Internal Size-cm† (in)	Maximum Capacity	Cat. No.	Qty.
	<b>17.7 x 17.7</b> (7 x 7)	1 litre	231-01-TCLP	10
	Stainless Steel Adapter,			
	required for use with ZHE		231-01-ZHE	ea

<sup>† 3-</sup>mm tolerance

## **For Light-sensitive Compounds**

### Black Layered Tedlar with Stainless Steel or Teflon Septum Fitting

Black Tedlar sample bags eliminate the need for cumbersome outer containers to protect light-sensitive samples. However, black Tedlar contains carbon black, which can adsorb some compounds to the bag. Laboratory tests on standard black Tedlar bags show sample degradation after 24 hours compared to equivalent tests with clear Tedlar. SKC black layered Tedlar bags allow for the convenient protection of light-sensitive compounds while maintaining sample integrity with an inner clear Tedlar layer. SKC black layered Tedlar bags are available with either a single stainless steel or Teflon septum fitting.

Internal Size-cm† (in)	Fitting	Maximum Capacity	Cat. No.	Qty.
<b>15.2 x 15.2</b> (6 x 6)	SS	0.5 litre	233-02B	10
<b>17.7 x 17.7</b> (7 x 7)	SS	1 litre	233-01B	10
<b>17.7 x 17.7</b> (7 x 7)	Teflon	1 litre	240-01B	5
<b>29.8 x 55.9</b> (11.75 x 22)	Teflon	10 litre	240-08B	5
<b>29.8 x 55.9</b> (11.75 x 22)	SS	10 litre	233-08B	10
Replacement Septums			233-01-RS	10



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<sup>† 3-</sup>mm tolerance

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SS: Stainless Steel

## **Teflon Bags**

## **Chemically Inert for Ultimate Performance**

## **Teflon with Single Teflon Septum Fitting**



Sample bags made of Teflon are considered the most chemically inert of bag materials and offer the ultimate performance in bag sampling. Teflon performs well under severe temperature conditions, from cryogenic (-240 C) to high heat (204 C), and is solvent-resistant to most chemicals. The single Teflon septum fitting is designed specifically for bag sampling.

Internal Size-cm† (in)	Maximum Capacity	Cat. No.	Qty.
<b>15.2 x 15.2</b> (6 x 6)	0.5 litre	240-02	5
<b>17.7 x 17.7</b> (7 x 7)	1 litre	240-01	5
<b>24.1 x 25.4</b> (9.5 x 10)	3 litre	240-03	5
Replacement Septums		233-01-RS	10

<sup>† 3-</sup>mm tolerance

## Teflon with Single Stainless Steel Septum Fitting



The benefits of Teflon and the economy of stainless steel are combined in SKC's alternative to the Teflon bag with Teflon fitting. The SKC economical single stainless steel septum fitting reduces the cost of using Teflon bags when a Teflon fitting is not required.

Internal Size-cm† (in)	Maximum Capacity	Cat. No.	Qty.
15.2 x 15.2 (6 x 6)	0.5 litre	243-02	5
<b>17.7 x 17.7</b> (7 x 7)	1 litre	243-01	5
<b>24.1 x 25.4</b> (9.5 x 10)	3 litre	243-03	5
Replacement Septums		233-01-RS	10

<sup>3-</sup>mm tolerance

# Mini Bags

#### **Tedlar with Teflon Septum Fitting**

Use a Mini Bag when a small sample is needed for analysis such as gas chromatography. Mini Bags feature a single syringe port fitting with a Teflon-lined septum for filling and emptying.



Internal Size-cm† (in)	Maximum Capacity	Cat. No.	Qty.
<b>5.1 x 8.9</b> (2 x 3.5)	10 ml	238-001*	10
<b>5.1 x 13.1</b> (2 x 5.5)	50 ml	238-002*	10
<b>5.1 x 19.7</b> (2 x 7.75)	100 ml	238-003*	10
Replacement Septums		238-01-RS	10

<sup>† 3-</sup>mm tolerance

# Teflon Tubing for Bag Sampling

Use only Teflon tubing for bag sampling to prevent sample loss through adsorption to the tubing's inner surface. For Tygon and rubber tubing, see p. 28.

Fite ever all CVC has fittings 3/ in ID 1/ in OD		
Fits over all SKC bag fittings, 3/16-in ID, 1/4-in OD	231-9-23	3 metre (10 ft)
Fits inside bag fitting, 1/16-in ID, 1/8-in OD	231-9-21	3 metre (10 ft)
Fits Vac-U-Chamber sample inlet, 1/4-in ID, 5/16-in OD,	231-937	3 metre (10 ft)
see p. 57.	231-924	15 metre (50 ft)

# Tech Tips

- Use only Teflon tubing and Teflon or Teflon-lined septums for bag sampling to prevent sample loss.
- Flush bags thoroughly with purified air or nitrogen before
- Do not use bags to collect unstable or highly reactive compounds.
- Do not ship sample bags by air unless the cargo cabin is pressurized. Check local regulations.
- When sampling for light-sensitive compounds, use black layered Tedlar or FlexFoil bags.
- When sampling for Carbon monoxide or Carbon dioxide, use SKC FlexFoil Bags, See page 56.
- Long-term storage of compounds in Tedlar bags is not recommended as chemicals can adsorb onto the inside surface of the bag.
- The maximum operating temperature of a bag can depend on O-ring or fitting temperature tolerance as well as bag material. Check individual bag operating instructions for maximum operating temperature specifications.
- Avoid filling any bag more than 80% of its maximum volume.



Incorrect



Bags supplied uncut.