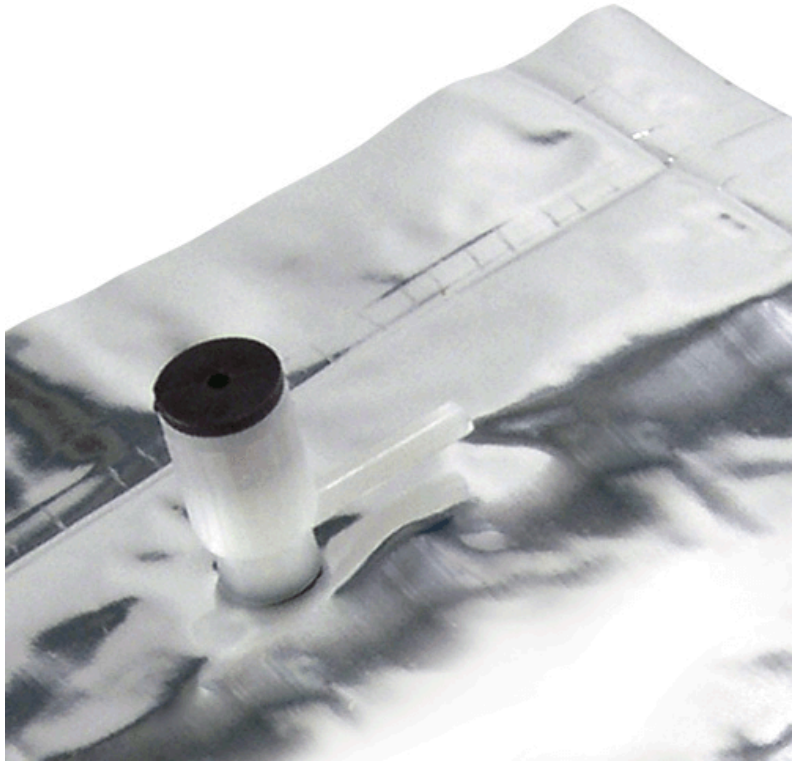
ANALYT MESSTECHNIK



INSTRUCTIONS FOR USE

SKC Sample Bags with Polypropylene Fitting

How to fill SKC Tedlar, FlexFoil PLUS and Standard FlexFoil sample bags with single polypropylene fitting, 232, 252 and 262 series, with a sample pump, and draw the sample off with a syringe.

AMTC-IN-0040

Rev. 2 · October 2026

About this document

SKC sample bags with a single polypropylene fitting collect air and gas samples for laboratory analysis. They come in three films: Tedlar (232 series), FlexFoil PLUS (252 series) and Standard FlexFoil (262 series). The one fitting does both jobs: its side stem takes the tubing from a sample pump, a turn of its upper part opens or closes the side stem like a valve, and the septum on top lets a syringe draw the sample off again.

Product and supplied items (p. 5) names the parts of the fitting, and Before use (p. 6) gives the rules for handling the bags. Procedure (p. 7) takes you from a new bag to a closed, filled bag, with a sample pump or in a Vac-U-Chamber. After use and sample handling (p. 9) covers shipping and the syringe, and Ordering information (p. 10) the tubing and the bags.

Bags with stainless-steel fittings are handled differently and have their own guide.

Keep these instructions for the lifetime of the product. The current revision is on the product page at analyt-mtc.com.

How these instructions mark information

NOTICE

Practices not related to personal injury — damage to the product, the process or the sample.

Note
Information that helps understanding; never a hazard.

Document information

Title	SKC Sample Bags with Polypropylene Fitting — Instructions for use
Document number	AMTC-IN-0040
Revision	Rev. 2 — October 2026
Applies to	SKC sample bags with single polypropylene fitting: 232 series (Tedlar), 252 series (FlexFoil PLUS) and 262 series (Standard FlexFoil)
Language	English
Manufacturer	SKC Inc.

Revision history

Rev.	Date	Change
2	October 2026	Quality programme: new document type, number and identity pages.
1	October 2026	First issue.

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CHAPTER 1

Safety

Read the safety messages in this chapter before you use the bags. Every safety message in these instructions is a NOTICE: it protects the sample and the bag. Each message also appears at the step it belongs to.

Intended use

The 232, 252 and 262 series bags take one sample of air or gas each, at atmospheric pressure. A sample pump fills the bag through the side stem of the polypropylene fitting, or the bag fills in a Vac-U-Chamber. A syringe draws the sample off through the septum for laboratory analysis.

Choose a bag whose film and fitting suit the compounds you sample, and do not use the bags for compounds that boil above 249.8 °F (121 °C). Use each bag for one sample only.

Handling and filling the bags

NOTICE

The bags take samples of air at atmospheric pressure. A pressurised bag can burst, and the sample is lost. Do not pressurise a bag. For the same reason, never send filled bags by air freight in an unpressurised cargo hold.

NOTICE

Tubing of any other material adsorbs part of the sample on its walls. That part never reaches the bag. Connect the bag to the pump with PTFE tubing only.

NOTICE

Carrying the bag by its fitting, or hanging it from it, can damage the seal. The bag then leaks, and such handling counts as misuse. Do not carry the bag by its fitting or hang it from it.

NOTICE

When you pierce the septum, the needle can go on into the bag film. It then punctures the film and damages the bag. Keep the needle tip inside the septum area.

NOTICE

A reused bag can carry residue of the previous sample, so the result is then invalid. Use each bag for one sample only. Do not reuse bags.

NOTICE

A bag filled to more than 80 % of its maximum volume is blown up taut and under pressure. It can burst, and the sample is lost (Figure 4-4 (p. 8)). Never fill a bag to more than 80 % of its maximum volume. At the end of the sampling time, switch the pump off and close the fitting.

CHAPTER 2

Product and supplied items

The bag and its fitting

The polypropylene fitting is sealed into the bag film. Its upper part, the septum body with the septum cap on top, turns to open and close the tubing connection; the side stem stays still. The same fitting fills the bag and gives the sample back for analysis.

The parts in Figure 2-1 (p. 5):

1. **Septum cap**, brown or white, with the syringe port in its centre.
2. **Septum body**, white; it turns together with the cap.
3. **Side stem**, the tubing connection for the tubing from the pump.

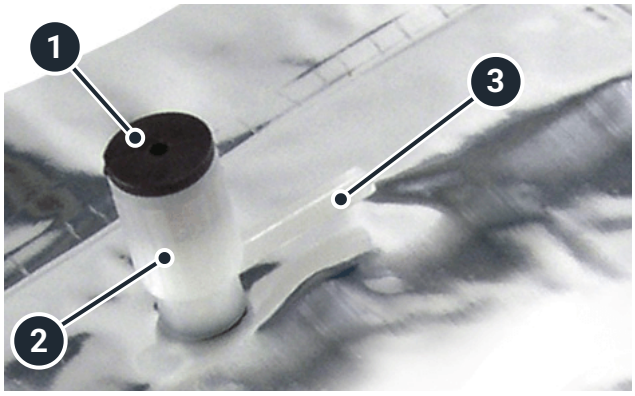


Figure 2-1. Polypropylene fitting on a FlexFoil bag. Parts numbered as in the list beside it.

CHAPTER 3

Before use

Rules for the bags

NOTICE

The bags take samples of air at atmospheric pressure. A pressurised bag can burst, and the sample is lost. Do not pressurise a bag. For the same reason, never send filled bags by air freight in an unpressurised cargo hold.

Note

Make sure the bag film and the fitting suit the compounds you sample.

Note

Boiling point limit. Do not use the bags for compounds that boil above 249.8 °F (121 °C).

NOTICE

Tubing of any other material adsorbs part of the sample on its walls. That part never reaches the bag. Connect the bag to the pump with PTFE tubing only.

Note

Analyse within 24 to 48 hours. Bags are not meant for storing mixtures of air contaminants over a long time.

NOTICE

A reused bag can carry residue of the previous sample, so the result is then invalid. Use each bag for one sample only. Do not reuse bags.

NOTICE

Carrying the bag by its fitting, or hanging it from it, can damage the seal. The bag then leaks, and such handling counts as misuse. Do not carry the bag by its fitting or hang it from it.

Note

Creases in FlexFoil film. Bags of FlexFoil film can show small crimps and creases from manufacture, quality testing or handling. They change only the look of the bag, not how it performs.

Warranty matters follow Analyt-MTC's terms of sale.

CHAPTER 4

Procedure

A sample pump pushes air from its exhaust port through PTFE tubing into the bag. The bag fills through the side stem while the fitting is open; you close it as soon as the bag holds enough. To fill a bag without passing the air through a pump, see Filling in a Vac-U-Chamber (p. 8).

Fill the bag with a pump

1. Flush the bag with purified air or nitrogen at least three times before use.
2. Connect PTFE tubing from the exhaust port of the sample pump to the side stem of the bag fitting (Figure 4-1 (p. 7)). Tubing 231-9-23 fits over both the side stem and the pump exhaust (see Ordering information (p. 10)).

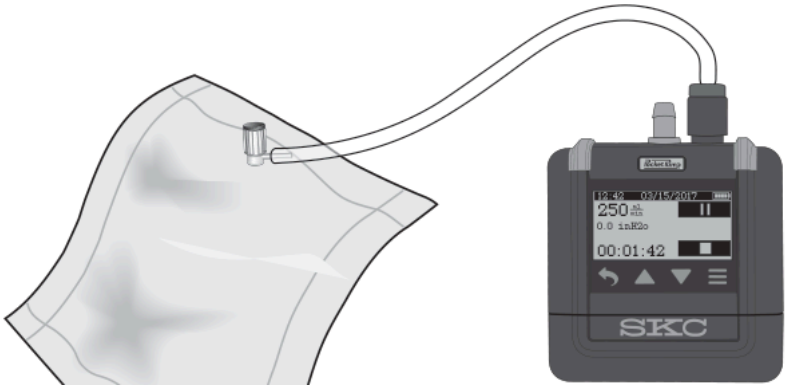


Figure 4-1. Bag connected to the exhaust port of a sample pump.

> **Note**
> **Do not turn the side stem.** Hold it still; turn only the upper part of the fitting.

3. Open the fitting: hold the side stem still and turn the whole upper part of the fitting, septum body and septum cap together, one full turn counterclockwise (Figure 4-2 (p. 7)).

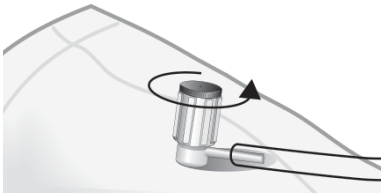


Figure 4-2. Open: one turn counterclockwise.

> **NOTICE**
> A bag filled to more than 80 % of its maximum volume is blown up taut and under pressure. It can burst, and the sample is lost (Figure 4-4 (p. 8)). Never fill a bag to more than 80 % of its maximum volume. At the end of the sampling time, switch the pump off and close the fitting.

> **Note**
> **Boiling point limit.** Do not sample compounds that boil above 249.8 °F (121 °C).

4. Switch the pump on.

5. Watch the bag as it fills, and stop before it is more than 80 % full (see How full to fill the bag (p. 8)).
6. When the sample is taken, switch the pump off.
7. Close the fitting: hold the side stem still and turn the whole upper part of the fitting clockwise until it is snug (Figure 4-3 (p. 8)).

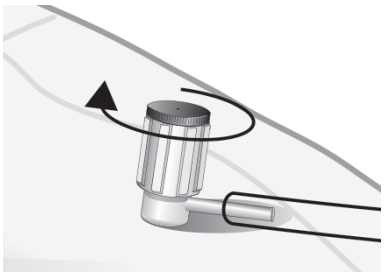
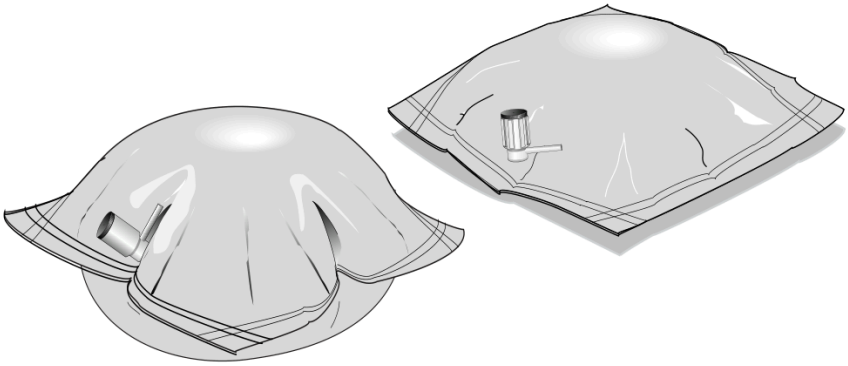


Figure 4-3. Close: clockwise until snug.

How full to fill the bag

Figure 4-4 (p. 8) shows an over-inflated bag and a correctly filled one.



Wrong: over-inflated, taut **Right:** filled, not taut

Figure 4-4. How full to fill the bag.

Filling in a Vac-U-Chamber

The SKC Vac-U-Chamber is a rigid box that holds the bag. Most personal sample pumps can draw a vacuum in the box, and the negative pressure pulls the sample straight into the bag. The air never passes through the pump, so neither the pump nor the sample can be contaminated. The rigid walls do not collapse under vacuum, and every surface the sample touches is made of inert material.

SKC Vac-U-Chamber models (supplied without pump)

Model	Fittings	For bags of	Order code
Small Vac-U-Chamber	Polypropylene	1 L	231-940
Large Vac-U-Chamber	Stainless steel	8 L	231-939
Extra-large Vac-U-Chamber	Stainless steel	10 L	231-944
Jumbo Vac-U-Chamber	Stainless steel	25 L	231-946

PTFE tubing for the chamber's sample inlet port is listed under Ordering information (p. 10).

CHAPTER 5

After use and sample handling

Send the samples

Have the samples analysed within 24 to 48 hours. When you ship filled bags to a laboratory, follow the packaging and transport regulations that apply, and do not let the bags travel by air freight in an unpressurised cargo hold (see Rules for the bags (p. 6)).

Removing the sample

The sample leaves the bag through the septum in the septum cap: a syringe needle pierces the septum and draws the sample off for analysis.

Draw off the sample

Note

Needle size. Use a needle with an outside diameter not larger than 22 gauge (0.028 in).

NOTICE

When you pierce the septum, the needle can go on into the bag film. It then punctures the film and damages the bag. Keep the needle tip inside the septum area.

1. Insert the needle carefully into the syringe port in the centre of the septum cap, brown or white, and pierce the septum (Figure 5-1 (p. 9)).
2. Draw the sample into the syringe.

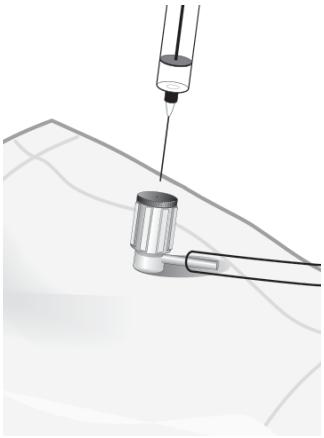


Figure 5-1. Needle into the syringe port.

Disposal

Dispose of used bags and their packaging under local regulations.

CHAPTER 6

Ordering information

Order from Analyt-MTC with the order codes. The product pages for the three films list every size with its pack quantity.

Sample bags with single polypropylene fitting

Series	Film	Sizes	Order code, replacement septum (10)
232	Tedlar	0.5, 0.7, 1, 3, 5, 8, 10, 25, 50, 75 and 100 L	232-01-RS
252	FlexFoil PLUS	1, 3, 5, 8, 10, 25 and 50 L	236-01-RS
262	Standard FlexFoil	1, 3, 5, 8, 10, 25 and 50 L	236-01-RS

PTFE tubing

Use	Size	Length	Order code
Fits over the bag fitting and the pump exhaust	ID 3/16 in OD 1/4 in	10 ft	231-9-23
Fits inside the bag fitting	ID 1/16 in OD 1/8 in	10 ft	231-9-21
Fits the sample inlet port of the Vac-U-Chamber	ID 1/4 in OD 5/16 in	10 ft	231-937
		50 ft	231-924

SKC sample bags also come with stainless-steel or PTFE fittings, in sizes from 0.5 to 100 litres, and as custom bags. The Analyt-MTC guide AMTC-TN-0007 reports the stability of samples stored in SKC bags. Ask Analyt-MTC about either.

CHAPTER 7

Service and contacts

Contact and support

ANALYT-MTC Messtechnik GmbH

German Headquarters

Klosterrunsstraße 18, 79379 Müllheim
Germany

+49 7631 5545

info@analyt-mtc.de

French Subsidiary

175 Avenue d'Alsace, 68000 Colmar
France

+33 3 89 41 47 78

info@analyt-mtc.fr

www.analyt-mtc.com

Before you call

Have the following at hand so that Analyt-MTC can help you quickly:

- the catalogue number of the bag, for example 232-01;
- the batch number on the bag label;
- the compounds you sample for, and the pump you fill the bag with.

SKC Sample Bags are made by SKC. Analyt-MTC answers technical questions on the bags and handles warranty matters and returns under its terms of sale. The Analyt-MTC contact details are above and on the back cover.

ANALYT-MTC Messtechnik GmbH

Sales, service and calibration

German Headquarters
Klosterrunsstraße 18, 79379 Müllheim
Germany
+49 7631 5545
info@analyt-mtc.de

French Subsidiary
175 Avenue d'Alsace, 68000 Colmar
France
+33 3 89 41 47 78
info@analyt-mtc.fr

www.analyt-mtc.com

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