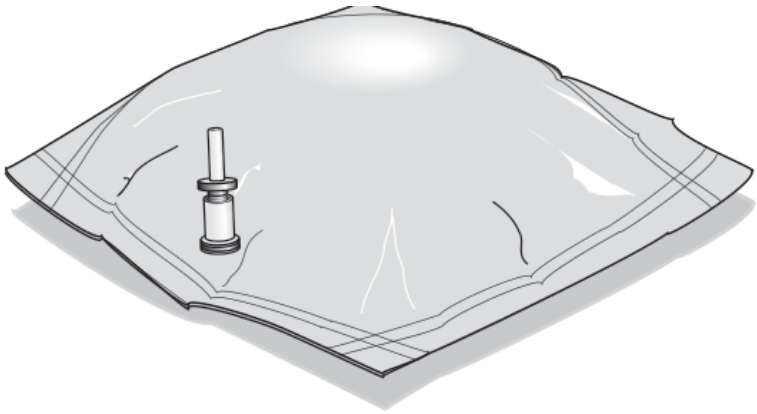


INSTRUCTIONS FOR USE

SKC Sample Bags, Single Stainless Steel Fitting

Preparing, filling and closing a gas sample bag with a single stainless steel fitting, then shipping it and drawing the sample off with a syringe, for SKC FlexFoil PLUS (253 series) and Standard FlexFoil (263 series) sample bags.

AMTC-IN-0042

About this document

SKC sample bags collect a sample of air or gas with a sample pump and hold it until it is analysed. The bags described here have a single stainless steel fitting that does three jobs: its stem takes the tubing from the pump, a knurled disc on the stem opens and closes the valve, and a septum at the base of the stem lets a syringe needle draw the sample off again.

These instructions apply to SKC FlexFoil PLUS sample bags (253 series) and SKC Standard FlexFoil sample bags (263 series) with a single stainless steel fitting; the sizes and catalogue numbers are in Bags covered by these instructions (p. 11). The instructions also cover the SKC 233 series sample bags with this fitting; for these, ask Analyt-MTC. A single PTFE fitting is used in exactly the same way. Bags with a polypropylene fitting have a guide of their own.

Read Product and supplied items (p. 6) and Before use (p. 7) first. Procedure (p. 8) takes you through flushing, filling and closing the bag step by step, After use and sample handling (p. 10) covers the way to the laboratory and the removal of the sample with a syringe, and Ordering information (p. 11) lists the bags and the accessories.

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, Single Stainless Steel Fitting — Instructions for use
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Applies to	SKC FlexFoil PLUS sample bags, 253 series, and SKC Standard FlexFoil sample bags, 263 series, with single stainless steel fitting
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 253 and 263 series bags take one sample of air or gas each, at atmospheric pressure. A sample pump fills the bag through the stem of the single stainless steel fitting, and a syringe needle draws the sample off through the septum at the base of the stem for laboratory analysis. A single PTFE fitting is used in the same way.

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

Handling and shipping the bags

NOTICE

PTFE tubing only. Other tubing adsorbs part of the sample on its walls, and that part never reaches the bag. Connect the bag to the pump with PTFE tubing.

NOTICE

Atmospheric pressure only. A bag under pressure bursts, and the sample is lost. The bags are made for samples at atmospheric pressure. Do not pressurise a bag. For the same reason, send filled bags by air only in a pressurised cargo hold. National and local regulations for packaging and transport apply.

NOTICE

The fitting is not a handle. Carrying the bag by the fitting or its valve, or hanging the bag from them, can damage the seal. The bag then leaks, and this counts as misuse. The fitting and its valve are very robust, but do not carry the bag by them or hang the bag from them.

NOTICE

Do not pierce the film. A needle pushed on beyond the septum can puncture the bag film. When you push the needle through the septum, take care that it does not go on to puncture the film.

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

No unpressurised air freight. In an unpressurised cargo hold, filled bags can burst. Send filled bags by air only if the cargo hold is pressurised.

CHAPTER 2

Product and supplied items

SKC sample bags collect a sample of air or gas with a sample pump and hold it until it is analysed.

The bag and its fitting

All connections of the bag are in one stainless steel fitting:

- **Stem.** The tube at the top of the fitting. PTFE tubing from the pump pushes over it.
- **Knurled disc.** The ridged ring on the stem is the shut-off valve. Counter-clockwise opens the valve, clockwise closes it.
- **Septum.** A seal at the base of the stem, inside the syringe port. A syringe needle pushed down through the stem pierces it to take the sample out.

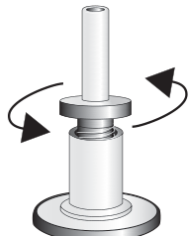


Figure 2-1. Single stainless steel fitting. The arrows show the disc turning to open.

CHAPTER 3

Before use

A sample bag is a single-use container for one sample of air at atmospheric pressure. Choose a bag that suits the compounds, connect it with PTFE tubing only, and get it to the laboratory within two days.

Rules for bag sampling

Note
Check the bag suits the compounds. Before you sample, make sure that both the bag film and the fitting are suitable for the compounds you want to collect.

NOTICE

PTFE tubing only. Other tubing adsorbs part of the sample on its walls, and that part never reaches the bag. Connect the bag to the pump with PTFE tubing.

Note
Boiling point limit. Do not use the bags for compounds with a boiling point above 249.8 °F (121 °C).

NOTICE

Atmospheric pressure only. A bag under pressure bursts, and the sample is lost. The bags are made for samples at atmospheric pressure. Do not pressurise a bag. For the same reason, send filled bags by air only in a pressurised cargo hold. National and local regulations for packaging and transport apply.

Note
Analyse within 48 hours. Bags are not suitable for storing mixtures of air contaminants for a long time. Have the sample analysed within 24 to 48 hours of sampling.

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

The fitting is not a handle. Carrying the bag by the fitting or its valve, or hanging the bag from them, can damage the seal. The bag then leaks, and this counts as misuse. The fitting and its valve are very robust, but do not carry the bag by them or hang the bag from them.

Note
Crimps and creases. 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.

CHAPTER 4

Procedure

Flush the bag, connect it to the exhaust port of the sample pump, open the valve, sample, and close the valve before the bag is more than 80 % full.

Preparing the bag

1. **Flush the bag.** Flush the bag with purified air or nitrogen at least three times before you use it.
2. **Connect the pump.** Push one end of a piece of PTFE tubing onto the exhaust port of the air sample pump, and the other end onto the stem of the bag fitting. The pump then blows the sampled air into the bag.



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

Taking the sample

> **Note**
> **Boiling point limit.** Do not sample compounds with a boiling point above 249.8 °F (121 °C).

3. **Open the valve.** Turn the knurled disc on the stem counter-clockwise, by no more than two turns, as shown in Figure 2-1 (p. 6).
4. **Sample.** Switch the pump on and sample in the usual way.
5. **Stop at 80 %.** Do not fill the bag to more than 80 % of its maximum volume. A correctly filled bag still lies flat at its sealed edges; a bag blown up into a tight dome is over-filled.

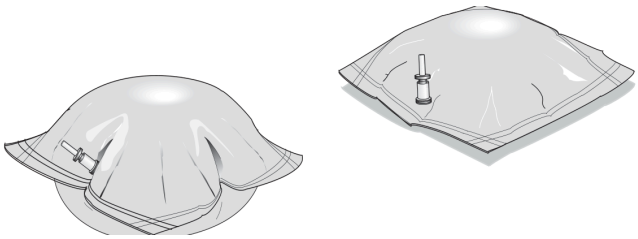
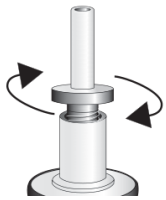


Figure 4-2. Left: over-inflated — wrong. Right: correctly filled.

6. **Switch the pump off.** When sampling is complete, switch the pump off.

7 **Close the valve.** Turn the knurled disc clockwise until it is snug. The valve is now closed and the sample is sealed in the bag.



CHAPTER 5

After use and sample handling

Shipping the bags

Send filled bags to the laboratory without delay: the sample should be analysed within 24 to 48 hours of sampling, and bags are not made for storing samples for a long time. The national and local regulations for packaging and transport apply.

NOTICE

No unpressurised air freight. In an unpressurised cargo hold, filled bags can burst. Send filled bags by air only if the cargo hold is pressurised.

Removing the sample from the bag

Note

Needle size. Use a needle no thicker than 12 gauge: an outside diameter of 0.109 in at most.

NOTICE

Do not pierce the film. A needle pushed on beyond the septum can puncture the bag film. When you push the needle through the septum, take care that it does not go on to puncture the film.

1. Insert the needle of the syringe carefully into the stem of the fitting.
2. Push it on until it pierces the septum in the centre of the base of the syringe port.
3. Draw the sample into the syringe.



Figure 5-1. Needle entering the stem.

Disposal

Dispose of used bags and their packaging under local regulations.

CHAPTER 6

Ordering information

Order from Analyt-MTC with the order codes.

Bags covered by these instructions

Bag size	Pack	Order code, FlexFoil PLUS	Order code, Standard FlexFoil
1 litre	10	253-01	263-01
3 litres	10	253-03	263-03
5 litres	10	253-05	263-05
10 litres	10	253-10	263-10
25 litres	5	253-25	263-25
50 litres	5	253-50	263-50

Single bags (pack of 1) of 1 and 3 litres, and 233 series bags: ask Analyt-MTC. Replacement septa and PTFE tubing are listed under Accessories (p. 11). SKC sample bags are also made of Tedlar film and with polypropylene or PTFE fittings, in sizes from 0.5 to 100 litres; for custom bags, ask Analyt-MTC. The Analyt-MTC technical note AMTC-TN-0007 reports the stability of samples stored in SKC bags.

Accessories

Description	Pack	Order code
Replacement septa for the single stainless steel fitting	10	233-01-RS
PTFE tubing, 3/16 in (4.76 mm) ID, 1/4 in (6.35 mm) OD. Fits over all SKC bag fittings and the Grab Air pump exhaust, and into the Pocket Pump TOUCH quick-connect adapter	10 ft	231-9-23
PTFE tubing, 1/16 in (1.59 mm) ID, 1/8 in (3.18 mm) OD. Fits inside the bag fitting	10 ft	231-9-21
PTFE tubing, 1/4 in (6.35 mm) ID, 5/16 in (7.94 mm) OD. Fits the sample inlet port of the Vac-U-Chamber	10 ft	231-937
	50 ft	231-924

CHAPTER 7

Service and contacts

SKC FlexFoil Sample Bags are made by SKC. Analyt-MTC is your contact for them.

Ordering and support

ANALYT-MTC Messtechnik GmbH

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Ordering and questions

Analyt-MTC supplies the bags, replacement septa and PTFE tubing, and answers your questions about bag sampling, other bag materials and fittings, custom bags and the storage stability of samples in bags. Order with the catalogue numbers in these instructions. Warranty and returns follow the terms of Analyt-MTC.

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