ANALYT MESSTECHNIK



INSTRUCTIONS FOR USE

SKC ULTRA Passive Samplers, 690 Series (Prefilled)

Models, storage, sampling and shipping for the prefilled SKC ULTRA passive samplers of the 690 Series, with and without built-in blank, for low ppb to ppt organic vapours in indoor and ambient air.

AMTC-IN-0050

Rev. 2 · October 2026

About this document

These instructions explain how to use the prefilled SKC ULTRA passive samplers of the 690 Series for organic vapours in indoor and ambient air, down to low ppb and ppt levels. It covers the five sorbents, each with and without a built-in blank, how to store the samplers, and how to take a sample and send it to the laboratory.

Read Safety (p. 5) first. Next, use Product and supplied items (p. 6) to identify your model, Before use (p. 7) to store it correctly, then follow Procedure (p. 8) step by step. Part numbers are in Ordering information (p. 10).

The ULTRA sampler needs no pump and no flow calibration: the vapours reach the sorbent by diffusion. You open the sliding cover to start sampling and close it to stop. What you must record is the sampling time, and the temperature and pressure at the sampling site.

Which sampler to use for a compound, and its sampling rate and sample time, is in *SKC ULTRA Passive Sampler — Reference guide*, document AMTC-RF-0005. The empty, user-fillable ULTRA housing 690-200 has its own instructions, document AMTC-IN-0051. Ask Analyt-MTC for a copy of either.

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

⚠ CAUTION

A hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

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

Document information

Title	SKC ULTRA Passive Samplers, 690 Series (Prefilled) — Instructions for use
Document number	AMTC-IN-0050
Revision	Rev. 2 — October 2026
Applies to	SKC ULTRA passive samplers 690-101, 690-103, 690-104, 690-105 and 690-106, and their versions without blank (-NB)
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.

SKC, ULTRA, Anasorb, Chromosorb, Tenax and Carbopack are trademarks of their owners. Information in these instructions is subject to change without notice. © 2026 ANALYT-MTC Messtechnik GmbH. All rights reserved.

Contents

1 **Safety** 5

Intended use 5

Protecting the sample 5

2 **Product and supplied items** 6

Models at a glance 6

3 **Before use** 7

Before you start 7

Storage and shelf life 7

4 **Procedure** 8

Take the sample 8

5 **Ordering information** 10

Ordering information 10

6 **Service and contacts** 11

Disposal 11

CHAPTER 1

Safety

Read this chapter before you use the sampler. Its safety message is repeated in the steps where it applies.

Intended use

The prefilled SKC ULTRA passive samplers of the 690 Series sample organic vapours in indoor and ambient air, down to low ppb and ppt levels, without a pump. Choose the sorbent that suits the compounds you want to measure (see Models at a glance (p. 6)). Do not store samplers with food, neither unused samplers nor samplers after sampling.

Protecting the sample

NOTICE

Marker ink. The ink of permanent markers and similar pens gives off volatile organic compounds. They can contaminate the sample. Do not write on the sampler label or the pouch with such a pen.

⚠ CAUTION

Samplers stored next to food can contaminate it, and eating contaminated food can harm you. Do not store samplers with food, neither unused samplers nor samplers after sampling.

CHAPTER 2

Product and supplied items

The ULTRA sampler is a small housing with a clip, two sorbent compartments and a sliding cover that opens and closes the diffusion holes of the sample compartment.

The prefilled SKC ULTRA passive samplers detect organic vapours in ambient and indoor air from the low ppb range down to ppt.

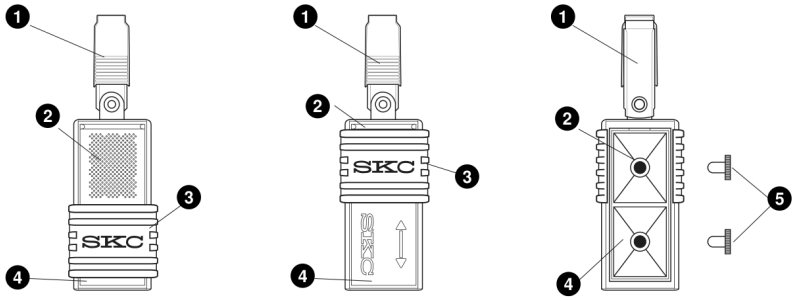


Figure 2-1. Cover in the open, sampling position (left), cover closed (centre) and back view (right). (1) Clip. (2) Sample sorbent compartment, with the diffusion holes on the front. (3) Sliding cover. (4) Blank/correction sorbent compartment, empty in the -NB models. (5) Plugs, one for each compartment.

With the cover slid down over the blank/correction compartment, the diffusion holes are open and the sampler collects. With the cover slid up over the holes, the sampler is closed; the arrow and the SKC mark are then visible on the lower part. The blank/correction compartment has no diffusion holes: the laboratory analyses it as the blank for the sample. In the **-NB** models this compartment is empty; choose them when your method does not need the built-in blank.

Models at a glance

Sorbent	Amount	With blank	Without blank	Analysis
Anasorb GCB1 [a]	370 mg	690-101	ask Analyt-MTC	thermal desorption, gas chromatography
Chromosorb 106	285 mg	690-103	ask Analyt-MTC	
Tenax TA	253 mg	690-104	690-104-NB	
Carbopack X	400 mg	ask Analyt-MTC	690-106-NB	
Anasorb CSC	500 mg	690-105	690-105-NB	solvent extraction (liquid desorption), gas chromatography

Amount: sorbent in each compartment of the models with blank, in the sample compartment only of the -NB models. (a) Comparable to Carbopack B. Sampling rates and sample times for each compound: *SKC ULTRA Passive Sampler — Reference guide* (AMTC-RF-0005); for other sampling-rate data, ask Analyt-MTC.

CHAPTER 3

Before use

The sampler stays closed in its pouch until it is in place. You open the cover to start, close it to stop, and return the sampler to the same pouch at once.

Before you start

- Check the expiry date, and that the sorbent suits your compounds (see Models at a glance (p. 6)).
- Indoors, have a stand 690-302 for each sampling point; outdoors, a shelter 690-303 and a secure place to hang it.
- Have a watch, a thermometer, a barometer and a pen whose ink does not give off solvents.
- For the way back: a container with a cool pack, and a chain-of-custody form from your laboratory.

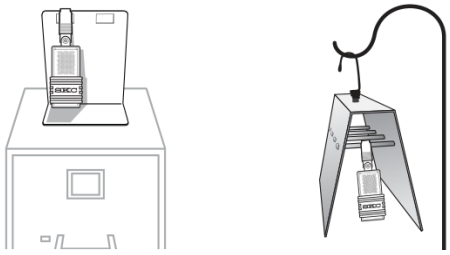


Figure 3-1. Indoors, the sampler is clipped to the stand 690-302 (left); outdoors, it hangs inside the shelter 690-303 (right).

NOTICE

Marker ink. The ink of permanent markers and similar pens gives off volatile organic compounds. They can contaminate the sample. Do not write on the sampler label or the pouch with such a pen.

Storage and shelf life

Shelf life is limited: check the expiry date on the packaging. Store the samplers at 4 °C (39.2 °F) or below, in a clean place free of organic solvents, before and after sampling.

Models	Before sampling	After sampling
690-101, 690-103, 690-104 and 690-106, with and without blank (-NB)	up to 30 days	up to 21 days
690-105, 690-105-NB	up to 6 months	up to 21 days

⚠ CAUTION

Samplers stored next to food can contaminate it, and eating contaminated food can harm you. Do not store samplers with food, neither unused samplers nor samplers after sampling.

CHAPTER 4

Procedure

Take the sample

1. Open the pouch and take the sampler out.
2. **Keep the pouch** in a clean place free of organic solvents: the sampler goes back into it after sampling.

   NOTICE

   Marker ink. The ink of permanent markers and similar pens gives off volatile organic compounds. They can contaminate the sample. Do not write on the sampler label or the pouch with such a pen.

3. Write the sample ID on the pouch and on the ID label of the sampler, and the sampling location and the date on the pouch.
4. Clip the sampler in place at the height your sampling plan requires (Figure 3-1 (p. 7)): indoors to the stand 690-302, outdoors inside the shelter 690-303, which is open at both ends and at the bottom so that air flows freely through it.
5. Outdoors, hang the shelter securely.
6. **Keep the diffusion holes free:** nothing may cover or block them.
7. To start sampling, slide the cover to the open position: the diffusion holes are visible (Figure 2-1 (p. 6), left).
8. Write the start time on the pouch label.
9. To stop sampling, slide the cover to the closed position: the arrow and the SKC mark are visible (Figure 2-1 (p. 6), centre).
10. Write the stop time on the pouch label.
11. **Measure the ambient temperature and the atmospheric pressure and write them down:** the laboratory needs both.
12. Put the sampler back into its resealable pouch **immediately**.
13. Check that the sample ID on the sampler matches the sample ID on the pouch.
14. Seal the pouch.

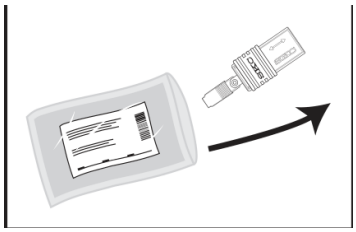


Figure 4-1. Step 1: taking the sampler out of its pouch.

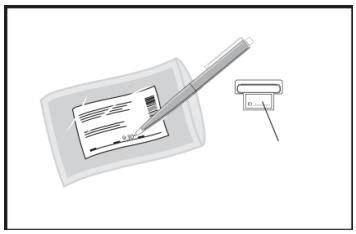


Figure 4-2. Step 3: writing the sample ID on the pouch and the label of the sampler.

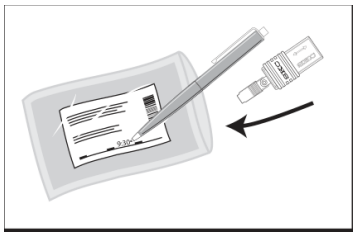


Figure 4-3. Step 12: the sampler goes back into its pouch.

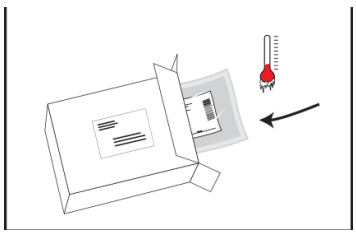


Figure 4-4. Steps 15 and 16: the sealed pouch goes into a container with a cool pack, which is sent to the laboratory.

15. Put the pouches into a container with a cool pack.
16. Send the samples by express to the laboratory, with the chain-of-custody form and the sampling information: sample IDs, locations, date, start and stop times, temperature and pressure. Analysis must follow within the storage time after sampling (see Storage and shelf life (p. 7)).

CHAPTER 5

Ordering information

Order from Analyt-MTC with the order codes.

Ordering information

Description	Pack	Order code
ULTRA PASSIVE SAMPLERS, PREFILLED, WITH BUILT-IN BLANK		
Anasorb GCB1 [a], 370 mg in each compartment	5	690-101
Chromosorb 106, 285 mg in each compartment	5	690-103
Tenax TA, 253 mg in each compartment	5	690-104
Anasorb CSC, 500 mg in each compartment [b]	5	690-105
ULTRA PASSIVE SAMPLERS, PREFILLED, WITHOUT BLANK		
Tenax TA, 253 mg	5	690-104-NB
Anasorb CSC, 500 mg [b]	5	690-105-NB
Carbopack X, 400 mg	5	690-106-NB
SAMPLING ACCESSORIES		
Stand for indoor sampling		690-302
Shelter for outdoor sampling		690-303
ANALYSIS ACCESSORY, FOR THE LABORATORY		
Thermal desorption tube (Perkin Elmer), 0.25 in OD, 3.5 in long, with screens and end caps	1	P226530

For any other version, contact Analyt-MTC. All samplers have a limited shelf life; see Storage and shelf life (p. 7). (a) Comparable to Carbopack B. (b) Analysis by solvent extraction (liquid desorption).

CHAPTER 6

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 sampler (for example 690-104-NB);
- the compounds you want to measure and the method your laboratory works to;
- the expected concentration and the planned sampling time.

Contact Analyt-MTC to order samplers and accessories, for the *SKC ULTRA Passive Sampler — Reference guide* (AMTC-RF-0005) and for help choosing the sorbent for your compounds. The empty, user-fillable housing 690-200, its sorbent vials and the transfer funnel are described in their own instructions (AMTC-IN-0051). Warranty matters and returns are handled under Analyt-MTC's terms of sale. Analyt-MTC's contact details are in this chapter and on the back cover.

Disposal

Dispose of used samplers and their packaging under local regulations.

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

AMTC-IN-0050 · Rev. 2 · 2026-10

© 2026 ANALYT-MTC Messtechnik GmbH. All rights reserved. Subject to technical changes without notice.