



Agilent Gas Sample Selector for 8860 and 8890

Safety Manual



Notices

Manual Part Number

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Safety Notices

CAUTION

A **CAUTION** notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in damage to the product or loss of important data. Do not proceed beyond a **CAUTION** notice until the indicated conditions are fully understood and met.

WARNING

A **WARNING** notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in personal injury or death. Do not proceed beyond a **WARNING** notice until the indicated conditions are fully understood and met.

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Safety Manual

To prevent any injury to the user or any damage to the instrument, it is essential that you read the information in this chapter and the gas chromatograph (GC) user manuals and safety manual.

If this manual is not in your native language, or if you have problems understanding the text, contact your Agilent office for assistance. Agilent cannot accept responsibility for any damage or injury caused by misunderstanding of the information in this manual.

Safety symbols

Warnings in the manual or on the instrument must be observed during all phases of operation, service, and repair of this instrument. Failure to comply with these precautions violates safety standards of design and the intended use of the instrument. Agilent Technologies assumes no liability for the customer's failure to comply with these requirements.

See accompanying instructions for more information.



Indicates a hot surface.



Indicates hazardous voltages.



Indicates earth (ground) terminal.



Indicates potential explosion hazard.



Indicates electrostatic discharge hazard.



Indicates a hazard.
See the Agilent GC user documentation for the item labeled.



Indicates that you must not discard this electrical/electronic product in domestic household waste



Safety Manual

Safety symbols

Manufacturing date.



Power symbol indicates **On/Off**. The apparatus is not completely disconnected from the main supply when the power switch is in the **Off** position.



Safety and regulatory information

The Agilent G3451A Gas Sample Selector conforms to the following safety standards:

- Canadian Standards Association (CSA): C22.2 No. 61010-1
- CSA/Nationally Recognized Test Laboratory (NRTL): ANSI/UL 61010-1
- International Electrotechnical Commission (IEC): 61010-1, 61010-2-081
- EuroNorm (EN): 61010-1

The Agilent Gas Sample Selector conforms to the following regulations on electromagnetic compatibility.

- CISPR 11/EN 55011: Group 1, Class A
- IEC/EN 61326-1



NOTE

The Gas Sample Selector is designed and manufactured under a quality system registered to ISO 9001. Declaration of Conformity available.

The Gas Sample Selector meets the following IEC (International Electro-technical Commission) classifications:

- Safety Class 1
- Transient Overvoltage Category II
- Pollution Degree 2

This unit has been designed and tested in accordance with recognized safety standards and is designed for use indoors in nonclassified locations. Do not operate it in an explosive atmosphere. If the instrument is used in a manner not specified by the manufacturer, the protection provided by the instrument may be impaired. Whenever the safety protection of the Gas Sample Selector has been compromised, disconnect the unit from all power sources and secure the unit against unintended operation. Refer servicing to qualified service personnel. Substituting parts or performing any unauthorized modification to the instrument may result in a safety hazard.

Detachable power cord declaration for Japan

(弊社提供の電源コードセットが汎用性がない旨を示す) 電源コードセットの取扱いについて (日本国内向け) 製品には、同梱された電源コードセットをお使いください。同梱された電源コードセットは、他の製品では使用できません。

NOTE

The power cords are for the Japanese market. Your product must only use the power cord that was shipped with this product. Do not use this power cord with any other product.

Sound Emission Certification for Federal Republic of Germany

Sound pressure Sound pressure $L_p < 70$ dB(A) according to DIN-EN 27779.
Schalldruckpegel Schalldruckpegel $LP < 70$ dB(A) nach DIN-EN 27779.

General safety precautions

WARNING

When handling or using chemicals for preparation or use within the GC, all applicable local and national laboratory safety practices must be followed. This includes, but is not limited to, correct use of Personal Protective Equipment (PPE), correct use of storage vials, and correct handling of chemicals, as defined in the laboratory's internal safety analysis and standard operating procedures. Failure to adhere to laboratory safety practices could lead to injury or death.

WARNING

This instrument is designed for chromatographic analysis of appropriately prepared samples. It must be operated using appropriate gases, and within specified maximum ranges for pressure, flows, and temperatures as described in this manual. If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

WARNING

It is the responsibility of the customer to inform Agilent customer support representatives if the instrument has been used for the analysis of hazardous samples, prior to any instrument service being performed or when an instrument is being returned for repair.

To ensure safe equipment operation, adhere to the following safety practices:

- Do not use flammable gas (such as H₂). Use inert gas (such as N₂) instead.
- Perform periodic leak checks on all supply lines and pneumatic plumbing.
- Do not allow gas lines to become kinked or punctured. Place lines away from foot traffic and extreme heat or cold.
- To avoid exposure to potentially dangerous voltages, disconnect the instrument from all power sources before removing protective panels.
- Your product must only use the power cord that was shipped with this product. Do not use this power cord with any other product.

WARNING

Replace faulty or frayed power cords immediately. Contact your Agilent service representative.

- The instrument should be placed in a suitable location with sufficient ventilation to remove gases. Make sure there is enough space around the instrument for it to cool off sufficiently.
- Do not turn on the Power Supply if there is a possibility of any electrical damage. Instead, disconnect the power cord, and contact your Agilent office.
- The supplied power cord must be inserted into a power outlet with a protective earth ground connection.
- Do not change the external or internal grounding connections as this could endanger you or damage the Power Supply.
- The Power Supply is properly grounded when shipped. You do not need to make any changes to the electrical connections or to the Power Supply chassis to ensure safe operation.
- Do not place containers with flammable liquids on this Power Supply. Spillage of the liquid over hot parts may cause fire.
- Never try to repair or replace any component that is not described in this manual without the assistance of an Agilent service engineer. Unauthorized repairs or modifications will result in rejection of warranty claims.
- Always disconnect the AC power cord before attempting any type of maintenance.
- The customer should not attempt to replace the fuses in the Power Supply.
- Damage can result if the Power Supply is stored under unfavorable conditions for prolonged periods (for example, subject to heat, water, and so forth).

Safety Manual

General safety precautions

- This unit has been designed and tested in accordance with recognized safety standards and is designed for use indoors.
- If the Power Supply is used in a manner not specified by the manufacturer, the protection provided by the Power Supply may be impaired.
- Substituting parts or performing any unauthorized modification to the Power Supply may result in a safety hazard.
- Before plugging in your instrument, verify that the voltage of your local power source is set appropriately.
- Do not use an Uninterruptable Power Supply (UPS) with a Gas Sample Selector.
- The input voltage of external power supply is 100 to 240V. Never use the mains supply which voltage fluctuations are exceeded $\pm 10\%$ out of this range.

CAUTION

Prior to moving, all covers and enclosures must be seated properly. Make sure all covers and enclosures are secure. Disconnect the power supplier and power cord.

WARNING

Appliance inlet coupler (main input power cord) is the power disconnect device. Do not position the instrument such that access to the coupler or plug is impaired.

WARNING

Do not place the Power Supply and Power cord on the top of GC or Gas Sample Selector when GC or Gas Sample Selector is powered on.

CAUTION

Electrostatic discharge is a threat to GC electronics.

The printed circuit (PC) boards in the sampler selector can be damaged by electrostatic discharge. Do not touch any of the boards unless it is absolutely necessary. If you must handle them, wear a grounded wrist strap and take other antistatic precautions.

WARNING

Do not place the Sample Selector behind the GC. Be careful when disconnecting the connection with the GC. During cool-down cycles, the GC emits hot exhaust which can cause burns.

Shipping Instructions

Follow these steps to prepare your Gas Sample Selector for shipping:

- 1 Cap every inlet and outlet port.
- 2 Cap all inlet and outlet tubing.
- 3 Always include the power cord kit and USB cable with the Gas Sample Selector.

Cleaning Instructions

To keep the Gas Sample Selector surface clean, refer to the following:

- Switch the GC off.
- Remove the GC power cable from the mains.
- Disconnect the Gas Sample Selector power cable.
- Use a soft (not hard or abrasive) brush to carefully brush away all dust and dirt.
- If the outer case is dirty, clean it with a soft, clean cloth dampened with mild detergent. Never clean the inside.
- Never use alcohol or thinners to clean the Gas Sample Selector. These chemicals can damage the case.
- Do not get water on the electronics components.
- Do not use compressed air to clean.

Disposal Instructions

Disposal of the Gas Sample Selector must be carried out in accordance with all (environmental) regulations applicable in your country.

Intended Use

Agilent products must only be used in the manner described in the Agilent product user guides. Any other use may result in damage to the product or personal injury. Agilent is not responsible for any damages caused, in whole or in part, by improper use of the products, unauthorized alterations, adjustments or modifications to the products, failure to comply with procedures in Agilent product user guides, or use of the products in violation of applicable laws, rules or regulations.

Recycling the Product

For recycling, contact your local Agilent sales office.



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