

Agilent 8860, 8890, and 990 Micro GC Gasifier

Safety Manual



Notices

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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



Manufacturing date.



Safety and regulatory information

The Agilent Gasifier 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, 61010-2-010, 61010-2-081
- EuroNorm (EN): 61010-1

The Agilent Gasifier conforms to the following regulations on Electromagnetic Compatibility

- (EMC) and Radio Frequency Interference (RFI):
- CISPR 11/EN 55011: Group 1, Class A
- IEC/EN 61326-1

This ISM device complies with Canadian ICES-001. Cet appareil ISM est conforme a la norme NMB-001 du Canada.



NOTE

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

The Gasifier 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 non-classified 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 Gasifier 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.

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) other than your sample as purging gas. 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 and vapors. 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).
- 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.
- Turn off and cool down the GC and Gasifier before disconnecting the Transferline and GC.
- Do not use an Uninterruptable Power Supply (UPS) with a Gasifier.
- The input voltage of external power supply is 100-240V. Never use the mains supply which voltage fluctuations are exceeded +/- 10 % out of this range.
- Stop using Gasifier with frayed or damaged Transferline, and contact your local Agilent sales office.

CAUTION

Gasifier will be turned on as long as the power cord is connected to the power source. There is no "On/Off" switch.

CAUTION

Make sure that the sampler has been removed prior to maintaining, moving or relocating the Gasifier. Prior to moving, all covers and enclosures must also be seated properly. Make sure all covers and enclosures are secure.

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

Transferline could be operated at temperatures high enough to cause serious burns. You should always cool the Gasifier to room temperature before working on it. If you must perform maintenance on the transferline, use a wrench and wear thermally protective gloves.

Add additional Warning information

WARNING

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

Shipping Instructions

Follow these steps to prepare your Gasifier for shipping:

- 1 Let the Gasifier cool down for at least 30 minutes before packing.
- 2 Cap every inlet and outlet port.
- 3 Cap all inlet and outlet tubing.
- 4 Always include the power cord kit and USB cable with the Gasifier.

Cleaning Instructions

To keep the Gasifier surface clean, refer to the remarks given below:

- Switch the GC off.
- Remove the GC power cable from the mains.
- Disconnect the Gasifier 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 Gasifier. 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 Gasifier 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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