

## 7667A Mini Thermal Desorber Site Preparation Checklist

Thank you for purchasing an Agilent instrument. To get you started and to assure a successful and timely installation, please refer to this specification or set of requirements.

Correct site preparation is the key first step in ensuring that your instruments and software systems operate reliably over an extended lifetime. This document is an **information guide AND checklist** prepared for you that outlines the supplies, consumables, space and utility requirements for your equipment for your site.

For additional information about our solutions, please visit our web site at <http://www.chem.agilent.com/en-US/Pages/HomePage.aspx>

### Customer Responsibilities

Make sure your site meets the following **prior to the installation date using the checklist below.**  
**For details, see specific sections within this document, including:**

- The necessary **laboratory or bench space is available.**
- The **environmental conditions for the lab** as well as laboratory gases, tubing,
- The **power requirements** related to the product (e.g. **number & location** of electrical outlets)
- The **required operating supplies** necessary for the product and installation
- Please consult **Other/Special Requirements** section below for other product-specific information
- For more details, please consult the product-specific Site Prep manual.

**If Agilent is delivering installation and familiarization services, users of the instrument should be present throughout these services; otherwise, they will miss important operational, maintenance and safety information.**

### Important Customer Information

1. If you have questions or problems in providing anything described as a *Customer Responsibilities* above, please contact your local Agilent or partner support/service organization for assistance prior to delivery. In addition, Agilent and/or it's partners reserve the right to reschedule the installation dependent upon the readiness of your laboratory.
2. Should your site not be ready for whatever reasons, please contact Agilent as soon as possible to re-arrange any services that have been purchased.
3. Other optional services such as additional training, operational qualification (OQ) and consultation for user-specific applications may also be provided at the time of installation when ordered with the system, but should be contracted separately.

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### Dimensions and Weight

Identify the laboratory bench space before your system arrives based on the table below. Pay special attention to the total height and total weight requirements for all system components you have ordered and avoid bench space with overhanging shelves. Also pay special attention to the total weight of the modules you have ordered to ensure your laboratory bench can support this weight.

#### *Special Notes:*

1. The Agilent 7667A Mini Thermal Desorber is installed on the left side or on the top of GC according to the version you ordered. It supports Agilent 7820A, 5975T LTM GC/MSD products and other GCs (including 7890). Plan to set up the work space as shown in “Dimensions and Weight”.

Instrument Description	Weight		Height		Depth		Width	
	Kg	lbs	cm	in	cm	in	cm	in
Agilent 7667A Mini Thermal Desorber (G4370A)	6.7	14.7	23.8	10.9	28	10.9	14.0	5.5
Agilent 7667A Mini Thermal Desorber (G4370M)	6.7	14.7	26.3	12.0	28	10.9	14.0	5.5



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**Bench space needed for G4370M – 5975T LTM GC/MSD system**

2. The distance between system modules may be limited by cables. The length of Agilent - supplied RS-232 Cable for ALS is 1.4 meters. The length of Agilent- supplied APG Remote Cable is 2 meters.



### Environmental Conditions

Operating your instrument within the recommended temperature ranges insures optimum instrument performance and lifetime.

#### *Special Notes:*

1. Performance can be affected by sources of heat & cold e.g. direct sunlight, heating/cooling from air conditioning outlets, drafts and/or vibrations.
2. The site's ambient temperature must be stable for optimum performance.

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3. The conditions in the following table assume a noncondensing and noncorrosive atmosphere.

Storage Temperature Range	Operating Temperature Range	Operating Humidity Range (%)	Altitude
-40 to 70 °C (-40 to 158 °F)	5 to 45 °C (41 to 113 °F)	5 to 95% (noncondensing)	4600m



### Power Supply

#### Special Notes:

1. If a computer system is supplied with your instrument, be sure to account for those electrical outlets.
2. 7667A will use a 250W power adaptor (PN: 0950-5534) and a power cord (listed below, selectable according to region) to provide the system power. The AC/DC power supply included in the system has a mating 6-pin plug.

Instrument Description	Line Voltage & Frequency (V, Hz)	Maximum Power Consumption (VA)	Maximum Power Consumption (W)
Power Adaptor	100-240V, 50/60Hz	280VA	250W
7667A Mini TD	24VDC	N/A	150W

<a href="#">8120-1369</a>	Power Cord, Australia/NZ, C13, 10 amp
<a href="#">8120-2104</a>	Power Cord, Switzerland, C13, 10 amp
<a href="#">8120-3997</a>	Power Cord, DK/Greenland, C13, 10 amp
<a href="#">8120-5182</a>	Power Cord, Israel, C13, 10 amp
<a href="#">8120-6869</a>	Power Cord, Argentina, C13 250V 10A RA/3
<a href="#">8120-6978</a>	Power Cord, Chile, C13, 10 amp
<a href="#">8120-8705</a>	Power Cord, GB/HK/SG/MY, C13, 10 amp
<a href="#">8120-4211</a>	Power Cord, India/S Africa, C13, 10 amp
<a href="#">8121-0723</a>	Power Cord, China, C13, 10 amp
<a href="#">8121-1638</a>	Power cord, Cambodia, C13, 250V 10 amp
<a href="#">8121-1226</a>	Power Cord, Europe/Korea C13, 10 amp
<a href="#">8121-1809</a>	Power Cord, Brazil, C13, 250V Max
<a href="#">8120-4753</a>	Power Cord, Japan, C13, 125V
<a href="#">8120-5342</a>	Power Cord, Japan, C15, 15 amp
<a href="#">G2025-60189</a>	Power Cord, 200V Japan, 16 amp
<a href="#">8120-0674</a>	Power Cord - THAILAND And PHILIPPINES
<a href="#">8121-1635</a>	Power Cord - TAIWAN
<a href="#">8120-1378</a>	Power Cord C13 125V 10A 5-15P 498G US
<a href="#">8120-3996</a>	Power Cord, C13, 250V 10A 6-15P US

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[8120-1992](#)

Power Cord C13M 125V 13A NEMA 5-15 HG US


**Gas Selection and Pressure**
***Special Notes:***

1. G4370M (7667A Mini TD, Enhanced Version) requires two gas supplies. One is for carrier gas, the other is for valve driver gas.
2. G4370A (7667A Mini TD, Entry Version) requires one gas supply. Carrier gas and drive gas are combined in one gas channel.
3. Agilent recommends that the purity of carrier gases is 99.9995%. It is also recommended that suitable traps (to remove oxygen, organics and water) are included in the carrier gas line just upstream of connection to the TD-GC analytical system. After gas connection, check the gas supply lines for leaks.
3. The carrier gas type should match the type used in GC.
4. Flow/pressure controlling devices require at least 20 psi (138 kPa) pressure differential across them to operate properly. Set source pressures and capacities high enough to ensure this.

		G4370M (Enhanced Version)
Carrier Gas	Type	Helium or Nitrogen
	Purity	99.9995%
	Min Pressure	20 psi above pressure used in GC method
	Max Pressure	85 psi
Drive Gas	Type	Air or Nitrogen (dry)
	Purity	Zero grade air 99.999% Nitrogen
	Min Pressure	45 psi
	Max Pressure	55 psi
	Suggested Pressure	50 psi

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Carrier Gas /Drive Gas	(G4370A Entry Version)
Type	Helium or Nitrogen
Purity	99.9995%
Min Pressure	50 psi
Max Pressure	85 psi



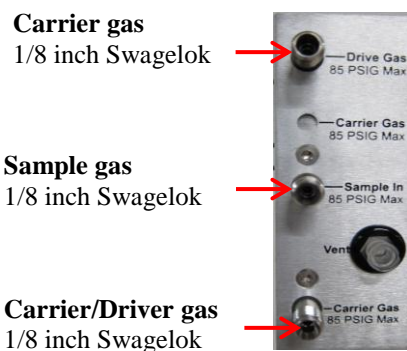
### Gas Plumbing

The instrument requires specific gas supply pressures as described before.

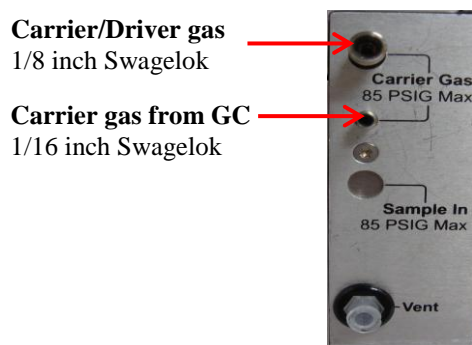
#### Swagelok nut and ferrules



#### Gas Panel of G4370M



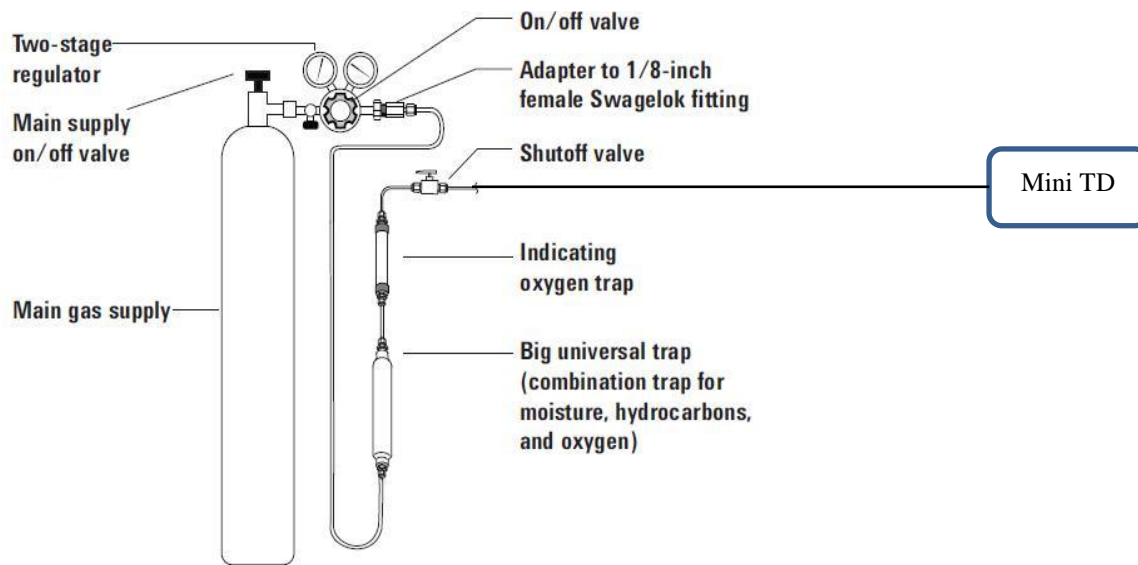
#### Gas Panel of G4370A



#### Special Notes:

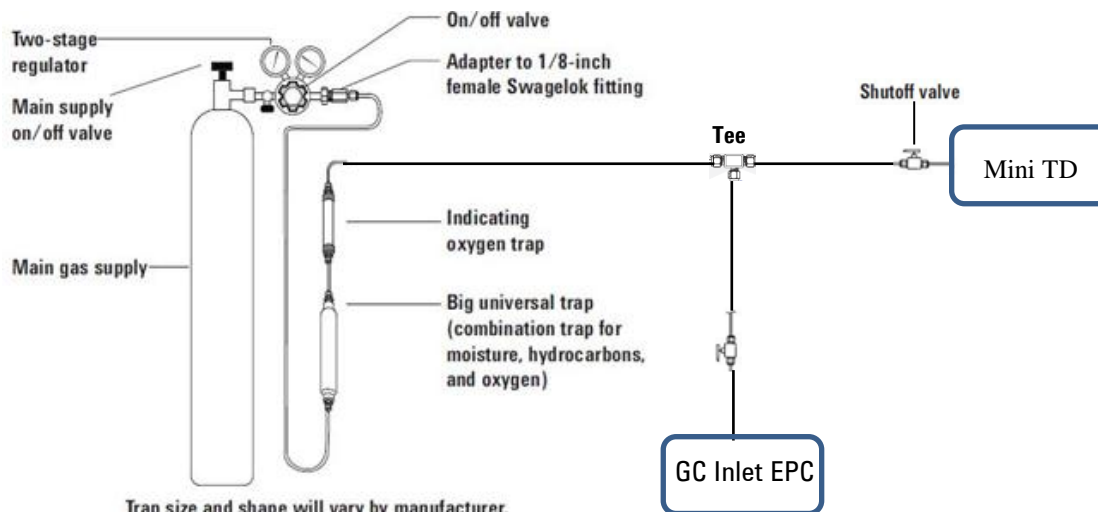
1. Agilent provides 1/8 – inch Cu Tubing to connect gas supply to Mini Thermal Desorber.
2. For G4370A (7667A, entry version), Agilent provides 1/16 stainless steel tubing, union, nut and ferrules to connect the GC inlet carrier gas to the Mini TD.
3. Customers need to prepare Tee fitting and shut off valves if they use one gas supply to support both GC and Mini TD.

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Trap size and shape will vary by manufacturer.

### Recommended traps and plumbing configuration from a carrier gas cylinder 1



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### Recommended traps and plumbing configuration from a carrier gas cylinder

- Gases are supplied by cylinders, an internal distribution system or gas generators. If using cylinders, it requires two-stage pressure regulators with packless, stainless steel diaphragms. Two-stage regulators eliminate pressure surges and should be prepared by customers.

Table below lists available Agilent two-stage tank regulators. All Agilent regulators are supplied with the

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1/8- inch Swagelok female connector. The Agilent catalog for consumables and supplies contains information to help you identify the correct regulator, as determined by the Compressed Gas Association (CGA). Agilent Technologies offers pressure- regulator kits that contain all the materials needed to install regulators properly.

### Cylinder regulators

Gas type	CGA number	Max pressure	Part number
Air	346	125 PSIG (8.6 Bar)	5183-4641
Helium, Nitrogen	580	125 PSIG (8.6 Bar)	5183-4644
Air	590	125 PSIG (8.6 Bar)	5183-4645

- On/off valves mounted on the outlet fitting of the two-stage regulator are not essential but are very useful. Be sure the valves have stainless- steel, packless diaphragms.
- Position the gas supplies as close as possible to the analytical system i.e. such that the gas lines are as short as possible.
- Tubing of 1/8- in diameter is adequate when the supply line is less than 15 feet (4.6 m) long. When connecting 7667A with sample gas for sampling, the length and inner diameter of the sampling tubing will affect the maximal sampling flow rate. Agilent will recommend use tubing with 1/8" I.D. and length shorter than 10 meters. Otherwise, the sampling flow rate may not meet Agilent published specification.
- Use PTFE tape to seal the pipe-thread connection between the pressure regulator outlet and the fitting to which you connect the gas tubing. Instrument grade PTFE tape (0460-1266), from which volatiles have been removed, is recommended for all fittings. Do not use pipe dope to seal the threads; it contains volatile materials that will contaminate the tubing.
- Table below lists the recommended traps. See the Agilent online store for the complete listing of traps and trap accessories. As shown in table below, install the indicating trap last so that it warns when the combination begins to fail.

### Recommended traps

Description	Part number
<b>Carrier gas</b>	
Big universal trap. Removes oxygen, moisture, hydrocarbons, carbon dioxide and carbon monoxide from helium gas streams	RMS
Indicating oxygen trap	IOT-2-HP



## Required Operating Supplies by Customer

### Special Notes

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- 7667A comes with a few basic tools and consumables depending on your order. You will also need other tools and parts for installation. Table below lists other useful tools/parts not provided with 7667A.
- See the Agilent website at [www.agilent.com/chem](http://www.agilent.com/chem) for the latest parts and supplies.

### Other Tools and parts needed for installation

Tool Required	Agilent Part Number	Used for
Torx T-20 driver	5182-3466	Installation of 7667A Mini TD Based Assembly for 5975T, G4370M only
Open-end wrenches: • 7/16 -inch • 5/16-inch	8710-0972 8710-0510	Carrier gas connection, both G4370M&G4370A Carrier gas connection, only for G4370A
Capillary tubing cutter, 4/PK	5181-8836	Stainless Steel Tube cutting for G4370A
Precision Tubing Cutter for 1/16 inch SS	5190-1442	Carrier gas connection, only for G4370A
Inlet Wrench	19251-00100	Transfer Line Installation, only for G4370A
<b>Parts Recommended</b>		
1/8-inch Swagelok Tee fitting	0100-0090	Gas supply plumbing.
Shutoff (ball) valve, 1/8-inch Swagelok	0100-2144	Install in gas supply lines, near the instrument, to quickly isolate the instrument when performing maintenance
Big universal trap	RMS	Gas supply plumbing
Indicating oxygen trap	IOT-2-HP	Gas supply plumbing
Two-stage regulator for Helium & Nitrogen	5183-4644	Gas supply plumbing
Two-stage regulator for Air	5183-4645	Gas supply plumbing
Instrument grade PTFE tape	0460-1266	Gas Supply plumbing
Handheld Gas Leak Detector	G3388A	Troubleshooting



### Shipping Kit

- Shipping Kit of G4370M

Description	Part Number	Quantity
Injection Needle ASS	G4372-60015	1 EA

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Installation Pole Assy	G4370-60010	2 EA
O-Ring 0.239-in-ID	0905-1820	2 PK
O-Ring 0.364-in-ID	0905-1819	1 PK
PTFE Filter Disks 6.3mm Marks TD PK 10	MKI-U-DISK3	1 PK
Catch Ferrule	G4372-20049	1 EA
Syringe 10uL FN bevel Tip	5190-1483	1 EA
Torx Screwdriver T10 Size	51820-3466	1 EA
Wrench-Double open-end 3/16*1/4 -in-Size	8710-2697	1 EA
Tubing Cutter	G4350-20120	1 EA
Tube fixer Tool	G4372-20048	1 EA

**2. Shipping Kit of G4370A**

Description	Part Number	Quantity
Stainless Steel Tube Assembly	G4370-60000	1 EA
Xfer Line Support Assembly	G3504-60620	1 EA
Union SS 1/16 inch Tubing	0100-0124	1 EA
Cap,1/16 inch Stainless Steel	0100-0050	1 EA
Cap Carrier Tube	G1544-20150	1 EA
Stainless Nut 1/16 inch	0100-0053	1 EA
1/16inch Ferrule set SST	0100-1490	1 EA
Union SS 1/16 inch Tubing	0100-0124	1 EA
O-Ring 0.364-in-ID	0905-1819	1 PK
O-Ring 0.239-in-ID	0905-1820	2 PK
PTFE Filter Disks 6.3mm Marks TD PK 10	MKI-U-DISK3	1 PK
Syringe 10uL FN bevel Tip	5190-1483	1 EA
Tube fixer Tool	G4372-20048	1 EA



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Catch Ferrule	G4372-20049	1 EA
Septum Retainer Nut for Transfer Line	G3452-60835	1 EA