



MSD[®] Reader Safety Guide



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1 Introduction

MSD develops, manufactures, and markets innovative and high-performance instruments, assays, and software for single and multiplex measurements of analytes within biological samples. MSD's products and services include a range of instruments, ready-to-use assay kits and consumables, and assay development and sample testing services.

For more details and information about MSD products and applications, please visit MSD's www.mesoscale.com® website.

1.1 Intended Audience

The intended audience of the *MSD Reader Safety Guide* is all users of the MESO® QuickPlex SQ 120MM, MESO QuickPlex® Q 60MM, and MESO SECTOR® S 600MM instruments, customer safety personnel, and regulatory personnel. This guide organizes regulatory, safety-related, and supplemental information critical for users to understand how to operate the system without causing damage and ensure data are properly generated and stored. Information about how to use each instrument can be found in each instrument's user guide.

1.2 How to Use This Guide

This guide is organized into chapters containing main topics and subtopics. Use the hyperlinked Table of Contents to find topics of interest.

i **NOTE:** Notes provide supplemental information on the proper use of the instrument and its software.

1.3 Formatting Information

This guide uses the following formatting conventions:




- Internal hyperlinks are formatted **bold and gray**. Click to move instantly to the referenced section or figure.
- External hyperlinks are formatted underlined and blue. Click to create an email message or open an external web page.
- When information applies to specific instruments, the phrase "Applies to" will appear along with the applicable instrument.

1.4 Warning and Caution Symbols

1.4.1 WARNING


General warnings advise operators of potential hazards and highlight the procedures or information necessary to avoid personal injury during instrument use. Table 1.1 contains example warning symbols used in this document.

TABLE 1.1. Warning Symbols

Symbol	Explanation
	Risk exists for a mechanical, chemical, or safety hazard
	Risk exists for an electrical hazard
	Risk of exposure to biohazards

1.4.2 CAUTION

A caution note, such as the example provided below, highlights procedures or information necessary to avoid equipment damage, software corruption, data loss, or invalid test results.

 **CAUTION:** Carefully read and understand all information in this document. Failure to read, understand, and follow the instructions in this publication may result in damage to the product, injury to operating personnel, or poor instrument performance.

1.4.3 Symbols and Labels

Table 1.2 defines the symbols found in this document and on the instrument and instrument labels.

TABLE 1.2. Symbols and Labels













Symbol/Label	Description
 WARNING	Warning messages are highlighted with this symbol and the word WARNING in red. They advise operators of potential mechanical or other hazards and highlight the procedures or information necessary to avoid personal injury.
 CAUTION	Caution messages are highlighted with this symbol and the word CAUTION in red. They highlight procedures or information necessary to avoid damage to equipment, corruption of software, loss of data, or invalid test results.
	This warning symbol indicates a potential electrical hazard.
 	These symbols indicate a risk of exposure to biohazards.
CLASS 1 LASER PRODUCT	This symbol indicates this is a Class 1 laser product. Applies to the MESO QuickPlex SQ 120MM and MESO QuickPlex Q 60MM
	This warning symbol indicates where a pinch hazard exists on the MESO SECTOR S 600MM.
 	These symbols indicate the presence of a rated fuse on the MESO SECTOR S 600MM. Only MSD Service Engineers should access electrical fuses.
	This symbol indicates the instruments and the electronic test plates are electrostatic sensitive devices.
V	This symbol indicates a measurement or requirement in volts.
A	This symbol indicates a measurement or requirement in Amperes, often referred to as Amps.
~	This symbol indicates electric current is in the form of alternating current (AC).
≡	This symbol indicates electric current is in the form of direct current (DC).
I	This symbol indicates that placing the toggle switch in this position will place the instrument in a powered-on state.
O	This symbol indicates that placing the toggle switch in this position will place the instrument in a powered-off state.
	This symbol, located on the front of the uninterruptible power supply (UPS), indicates pressing this button will change the system's power state. Pressing this button when the system is powered off will connect power to the system. Pressing this button when the system is powered on will disconnect power to the system.
	This symbol marks the location of the USB I/O Port on the instrument.
	This symbol marks the location of the External Stop or Halt Control I/O Port on the MESO SECTOR S 600MM
CE	The European Conformity Marking indicates that the device complies with the essential requirements of the relevant European health, safety, and environmental protection legislation, including compliance with the European Directive Restriction of Hazardous Substances (RoHS) 2011/65/EU, as amended.

TABLE 1.2. Symbols and Labels

Symbol/Label	Description
	<p>The United Kingdom Conformity Assessed (UKCA) Marking, used for goods being placed on the market in Great Britain (England, Wales, and Scotland), indicates the device complies with relevant UK legislation. This marking applies to goods placed on the market after January 1, 2023.</p>
	<p>The WEEE symbol above a horizontal bar indicates this product was placed on the market after 2005 in compliance with the European Union (EU) Waste Electrical and Electronic Equipment (WEEE) Directive 2012/19/EU, as amended.</p>
	<p>The SGS System Certification Mark, or “Q-mark”, is issued by the Société Générale de Surveillance. It indicates an accredited certification body has tested this instrument for electromagnetic compatibility (EMC) and safety. This product is certified in the United States and Canada. The SGS contract number for Meso Scale Diagnostics, LLC. is 800052.</p>
	<p>The China Ministry of Industry and Information Technology requires this logo, which indicates the environmental protection use period of this instrument in accordance with Order No. 32 (Management Methods for the Restriction of the Use of Hazardous Substances in Electrical and Electronic Products). This product contains certain hazardous substances and, under normal operating conditions, can be used safely without harm to the user or the environment from these substances for 50 years from the date of manufacture.</p>
	<p>This Regulatory Compliance Mark (RCM) is required by the Australian Communications and Media Authority (ACMA). It indicates this instrument complies with all applicable ACMA regulatory arrangements, and the instrument meets the regulatory requirements necessary for shipment to the Australian market.</p>

2 Safety and Regulatory Information

2.1 Regulatory and Safety Certifications

The MESO SECTOR S 600MM, MESO QuickPlex SQ 120MM, and MESO QuickPlex Q 60MM instruments have been tested to comply with applicable regulatory standards; the instruments carry the SGS System Certification and CE marks.

Regarding BS EN 61326-1: 2013 Electrical Equipment for Measurement, Control, and Laboratory Use – EMC Requirements:

The instruments are designed for operation in a controlled electromagnetic environment. Transmitters of RF energy such as mobile telephones may not be used in close proximity.

Regarding FCC Rules, Part 15, Subpart B, a Class A digital device:

The instruments have been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. The equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the user guides, may cause interference, in which case the user will be required to correct the interference at his own expense.

Regarding Industry Canada Interference-Causing Equipment Standard:

This Class A digital apparatus complies with CAN ICES-001(A).

Cet appareil numérique de la Classe A est conforme à la norme NMB-001(A) du Canada.

Contact MSD Scientific Support with inquiries about the regulatory compliance of MSD instrumentation.

2.2 Laser

The MESO QuickPlex SQ 120MM and MESO QuickPlex Q 60MM instruments are classified per CFR Title 21 part 1040.10 and part 1040.11 as Class 1 laser products with built-in barcode readers. The built-in barcode readers are classified as Class 2 lasers, but because they are within the instruments and not accessible to customers, the MESO QuickPlex SQ 120MM and MESO QuickPlex Q 60MM instruments are classified as Class 1 laser products. The MESO QuickPlex SQ 120MM and MESO QuickPlex Q 60MM instruments are also classified as Class 1 in accordance with IEC 60825-1:2014.

The MESO QuickPlex SQ 120MM and MESO QuickPlex Q 60MM instruments comply with FDA performance standards for laser products except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007.

2.3 WEEE Compliance

The MESO SECTOR S 600MM, MESO QuickPlex SQ 120MM, and MESO QuickPlex Q 60MM instruments were placed on the market after 2005 in compliance with the European Union (EU) Waste Electrical and Electronic Equipment (WEEE) Directive 2012/19/EU, as amended.

For all inquiries regarding the recycling of shipping materials and disposal of the instrument, contact MSD Instrument Service.

2.4 Hazardous Substances

In accordance with People's Republic of China Order No. 32 of the Ministry of Industry and Information Technology (Management Methods for the Restriction of the Use of Hazardous Substances in Electrical and Electronic Products), MSD has designated an environmental protection use period of 50 years for the MESO SECTOR S 600MM, MESO QuickPlex SQ 120MM, and MESO QuickPlex Q 60MM instruments when used under normal operating conditions.

TABLE 2.1. MESO SECTOR S 600MM Hazardous Substances

Part Name	Hazardous Substances					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Motion control system	X	0	0	0	0	0
Plate contact mechanism	X	0	0	0	0	0
Plate stacker assembly	X	0	0	0	0	0
Main control board	X	0	0	0	0	0
Cable assemblies	X	0	0	0	0	0
Printed circuit boards	X	0	0	0	0	0

This table was prepared in accordance with the provisions of SJ/T 11364.
 O: Indicates that said hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement of GB/T 26572.
 X: Indicates that said hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement of GB/T 26572.

TABLE 2.2. MESO QuickPlex SQ 120MM Hazardous Substances

Part Name	Hazardous Substances					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Motor with pulley	X	0	0	0	0	0
Contact board	X	0	0	0	0	0
Cable assemblies	X	0	0	0	0	0
Printed circuit boards	X	0	0	0	0	0

This table was prepared in accordance with the provisions of SJ/T 11364.
 O: Indicates that said hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement of GB/T 26572.
 X: Indicates that said hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement of GB/T 26572.

TABLE 2.3. MESO QuickPlex Q 60MM Hazardous Substances

Part Name	Hazardous Substances					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Motor with pulley	X	0	0	0	0	0
Contact board	X	0	0	0	0	0
Cable assemblies	X	0	0	0	0	0
Printed circuit boards	X	0	0	0	0	0

This table was prepared in accordance with the provisions of SJ/T 11364.
 O: Indicates that said hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement of GB/T 26572.
 X: Indicates that said hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement of GB/T 26572.

3 General Operation and Hazards

3.1 General Operation

The instrument's camera must cool to the appropriate temperature before reading an assay plate. The instrument must be connected to the computer via the MSD-provided USB cable. Power on the instrument and wait 30 seconds. Then power on the instrument's computer and log in to Windows. The Methodical Mind® software will automatically start. Log in to the software to initiate the camera cooling process.

Each instrument requires different amounts of time for the camera to cool and equilibrate. Wait the amount of time shown in Table 3.1 before reading a plate.

TABLE 3.1. CCD Camera Cooling Times

Instrument	Typical Cooling and Equilibration Time
MESO SECTOR S 600MM	35–45 minutes
MESO QuickPlex SQ 120MM	15–25 minutes
MESO QuickPlex Q 60MM	5–10 minutes

NOTE: If the Methodical Mind software is closed, the MESO SECTOR S 600MM, MESO QuickPlex SQ 120MM, and MESO QuickPlex Q 60MM instruments will maintain the camera temperature. If the MESO QuickPlex Q 60MM's laptop is restarted, CCD camera cooling may be disrupted. Log in to Windows and the Methodical Mind Instrument software to restart CCD camera cooling.

WARNING: The instrument must be operated with all covers in place. If the unit is operated in any manner not specified in this guide, the protection provided by the equipment may be impaired.

CAUTION: MSD instruments are tested with specific models and configurations of computers and cables. Do not attempt to operate the instrument with a computer or cable that has not been supplied by MSD. Do not attempt to reimage the instrument's computer. Only use computers that have been provided by MSD with the instrument.

CAUTION: USB devices should not be connected to or disconnected from the instrument's computer while plates are being read.

CAUTION: Changes to the computer clock can cause a system error if the changes are made during a plate read. A system error may also occur if a plate is being read when the time is automatically changed from standard to daylight savings time or vice versa.

NOTE: MSD instruments should be operated in a dust-free environment below an altitude of 6,500 ft (2,000 m) with an ambient temperature between 20 °C and 26 °C and 10–80% non-condensing humidity. Environments or locations with high levels of vibration should be avoided. See the user guide for each instrument for complete environmental specifications.

CAUTION: Keep the instrument away from direct sources of heat or cold and direct or indirect sunlight. Ensure that the rear and side cooling vents are not blocked.


CAUTION: Do not place any objects, materials, or liquid containers on top of the instrument or computer.

CAUTION: Falling objects or splashing liquids, including chemically reactive or infectious reagents, can cause damage to the instrument or cause injuries. Avoid handling or storing infectious or radioactive materials near the instrument.


3.2 Software and Operating System Compatibility

Computers supplied with MSD instruments have not been tested for compatibility with programs and hardware not supplied by MSD. Installation of additional software or hardware may interfere with the functionality of the Methodical Mind software, connectivity to the instrument, or connectivity to the Methodical Mind Application Services. If additional software or hardware must be installed, exit the Methodical Mind software, perform the installation, restart Windows, and verify the software and instrument operation by reading the electronic test plate.


Installing updates (Windows, computer, or software) while reading plates can interfere with system operation. Exit the Methodical Mind software before installing updates, and when the update is complete, restart the computer and verify system operation. Configure automatic updates to notify the user before installation or schedule them to occur when the system is not in use.


 **NOTE:** After your organization's IT department joins the instrument computer to your organization's network and domain, operating system updates will likely be managed per group policies set by your IT department. Consult your IT department to configure automatic updates to occur during times when the instrument will not be in use.

 **CAUTION:** To prevent data loss, configure the plate data file export location to a secure network folder that is routinely backed up.


 **CAUTION:** To prevent the computer from automatically restarting while a run is in progress, have your IT department configure automatic updates to notify the user before installation or schedule automatic installation for a time when the system will not be in use.


 **CAUTION:** Only install driver updates provided via Windows Updates or the computer vendor (e.g., Dell Command software for Dell computers). Updating hardware drivers specific to the instrument could cause the system to stop working properly.


 **CAUTION:** The Methodical Mind Instrument software is optimized for a display resolution of 1920×1080 with the scale set to 100%. Changing the resolution or scale in the Windows display settings or the display adapter software may affect the usability of the software.

 **CAUTION:** Support from MSD for additional software installed on the instrument computer is limited. Have your organization's IT department install any additional required software.

 **CAUTION:** Disabling USB storage or USB communication functions through group policies or endpoint protection software will interfere with the proper operation of the Methodical Mind software and connectivity to the instrument.

 **CAUTION:** If your organization's IT department installs additional endpoint protection software, ensure the Methodical Mind Instrument software is not blocked from communicating with the Methodical Mind Application Services. The software requires internet connectivity to the methodicalmind.com™ and amazonaws.com domains through your organization's firewall. If communication is blocked, enable HTTPS communication with *.methodicalmind.com and *.amazonaws.com via TCP port 443. (The asterisk denotes a wildcard character. Some firewall devices may require a different format to enable the entire domain.)

 **CAUTION:** Use of other applications while plates are being read may interfere with system performance. The use of operating system power-saving features that disable USB and network communication will cause the system to stop responding.

 **CAUTION:** If endpoint protection software scans files and folders which the Methodical Mind Instrument software uses system performance will be degraded, and critical functions, such as reading plates and saving data, can be interrupted. Add the following folders to your endpoint protection software's scanning exception list to prevent this from happening:

C:\Program Files (x86)\Methodical Mind\

C:\Program Files (x86)\Microsoft SQL Server\

For the MESO QuickPlex SQ 120MM and MESO QuickPlex Q 60MM instruments, also add the drive named "MSDIDC" to the exception list.

3.3 Hazards

This section contains notices and warnings of hazards and should be read carefully. Before working with the instrument, become familiar with all safety precautions and regulations concerning the handling of materials and the instrument's electrical and mechanical components. Operating this device in a manner not specified by the product documentation may impair the electrical and thermal protection provided by the equipment.

As with most laboratory instruments, MSD instruments present certain hazards for users. There are six key types of hazards:

- Electrical
- Chemical and biological
- Visual (Only applicable to the MESO QuickPlex SQ 120MM and MESO QuickPlex Q 60MM)
- Mechanical
- ESD sensitivity
- Electromagnetic interference and susceptibility



FIGURE 3.1. MESO SECTOR S 600MM Hazards



FIGURE 3.2. MESO QuickPlex SQ 120MM Hazards

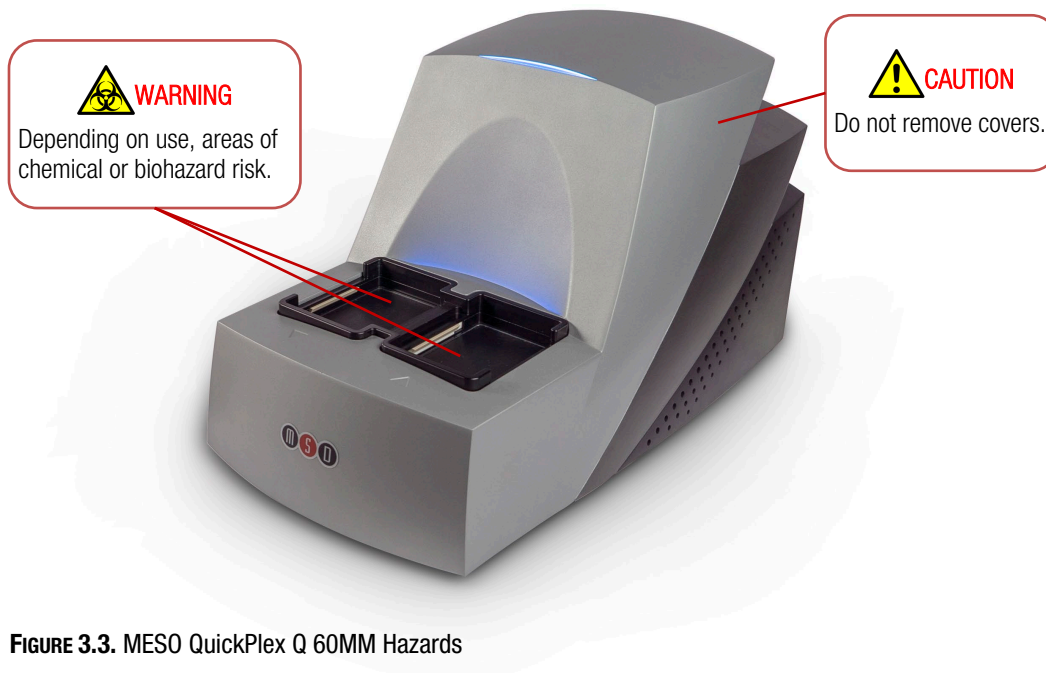


FIGURE 3.3. MESO QuickPlex Q 60MM Hazards

3.3.1 Electrical Hazards

MSD instruments have been designed and tested for compliance with appropriate electrical safety standards.

WARNING: For best performance, remove any sample or reagent spillage from the instrument. For safety, the operator should power down the instrument and disconnect the instrument's power cord before cleaning near moving parts. For significant spills or liquid intrusion into the instrument's enclosure (e.g., resulting from a fire protection water sprinkler), contact **MSD Instrument Service**.

WARNING: Intrinsic safety testing has not been performed on MSD instruments. Accordingly, MSD instruments must not be operated in hazardous (classified) atmospheres as defined by the National Fire Protection Association and the National Electric Code or other applicable local regulations.

WARNING: MSD instruments contain high voltage. Disconnect the instrument from its power source before changing a fuse, moving the instrument, or connecting/disconnecting any cable.

WARNING: The MESO SECTOR S 600MM instrument contains AC and DC voltages and uses an internal 24 volt DC power supply. The MESO QuickPlex SQ 120MM and MESO QuickPlex Q 60MM instruments contain DC voltages and use an external 24 volt DC power supply. Never remove any instrument covers, as this will expose electrical circuits. Only authorized service personnel should perform repairs to the interior of the system.



FIGURE 3.4. On and Off Symbols

When the power switch of the MESO SECTOR S 600MM is in the Off position (See **Figure 3.4**), all internal electrical circuits are disconnected from both the live and neutral lines of the electrical power source.

When the power switch of the MESO QuickPlex SQ 120MM and MESO QuickPlex Q 60MM is in the Off position (See **Figure 3.4**), some low voltage is still present in the internal circuitry. To completely de-energize the instrument, disconnect the power cord from the back of the instrument.

CAUTION: The MESO SECTOR S 600MM instrument, computer, and UPS are grounded. Do not use adapters or extension cords that disable the ground connection, as this could lead to a shock hazard. Always connect power cords to outlets that provide ground connections.

NOTE: We strongly recommend that users of laboratory instruments follow the Clinical and Laboratory Standards Institute (CLSI) document entitled GP17-A3, Clinical Laboratory Safety; Approved Guideline – Third Edition, Section 8.2, Electrical Equipment.

WARNING: MSD instruments must be located in a position where the power switch and power input connector are accessible.

CAUTION: Only power supply cables with a 10 A or higher current rating can be connected to the MESO QuickPlex SQ 120MM and MESO QuickPlex Q 60MM external power supplies or to the MESO SECTOR S 600MM power input.

3.3.2 Chemical and Biological Hazards

Users are responsible for taking all necessary precautions against hazards associated with the use of laboratory chemicals. In the course of preparing assay plates, users may work with potent chemicals, such as acids, bases, and solvents, and thus be exposed to chemical hazards. This may also be the case when working with cleaning or disinfecting agents and with some reagents used in assays.

Laboratory regulations and good laboratory practices concerning the use of such chemicals should be followed at all times. Product labels, package inserts, and product information sheets with specific usage recommendations are provided for all plates and reagents used with the instrument. Additional product-specific safety information is available in the applicable safety data sheet(s) (SDS), which can be obtained from MSD Customer Service or at www.mesoscale.com. Use personal protective equipment recommended by your facility when handling any of these reagents.

WARNING: Samples, user reagents, or controls used in assays may be infectious or biohazardous. By working with these materials, users may be exposed to biological hazards. Laboratory regulations and site safety procedures concerning the handling and disposal of potentially infectious material should be followed at all times. Ensure surfaces are decontaminated and cleaned, and proper personal protective equipment is worn to prevent exposure.

WARNING: Labels are affixed to the MESO SECTOR S 600MM elevator platforms indicating a potential biological or chemical hazard.



WARNING: The plate input and output elevator platforms of the MESO QuickPlex SQ 120MM and MESO QuickPlex Q 60MM instruments are marked with the biohazard symbol indicating a potential biological hazard.



CAUTION: When reading multiple plates in a run, ensure that the MESO SECTOR S 600MM stack tube is not overloaded. See the stack tube plate capacity in the MESO SECTOR S 600MM User Guide.

WARNING: Loading a tall stack of plates on the MESO SECTOR S 600MM instrument could lead to spilling potentially harmful chemical reagents. Use caution when loading the stack tubes.

WARNING: Do not exceed 5 plates on the input and output stacks of the MESO QuickPlex SQ 120MM and MESO QuickPlex Q 60MM instruments or on the MESO SECTOR S 600MM instrument when not using stack tubes. Exceeding 5 plates could lead to spilling potentially harmful chemical reagents.

CAUTION: When reading multiple plates in a run, ensure that the plate stacker or stack tube is not overloaded. Not removing the completed plates from the output stack or the output stack tube may cause spills if the number of completed plates exceeds the capacity of the output stack or stack tube.


WARNING: Users should avoid breathing reagent fumes. Gloves and goggles should be worn when disposing of used plates. If skin comes in contact with reagents, rinse the exposed area with water immediately, and follow appropriate safety protocols as determined by your facility. Dispose of used plates according to federal, state, and local regulations.

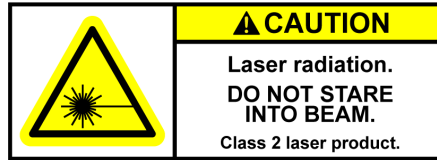
WARNING: Wear appropriate personal protective equipment and avoid skin contact and inhalation when handling plates that contain or have been exposed to hazardous reagents.


WARNING: The plate stacker input and output locations are considered susceptible to contamination during normal use. The use of personal protective equipment and good laboratory practices are strongly suggested when working in these areas.

3.3.3 Visual Hazards

The MESO QuickPlex SQ 120MM and MESO QuickPlex Q 60MM instruments use a scanning barcode reader with a Class 2 laser rated at a maximum of 1 mW. The laser beam is not visible during normal operation. However, there is a risk of exposure if the instrument is operated without the external covers and the internal barcode reader cover.

 **WARNING:** DO NOT STARE INTO THE BEAM. The laser is only directly viewable and accessible by qualified service personnel.



 **WARNING:** Operation of the instrument without external covers and the internal barcode reader cover may result in hazardous radiation exposure.

3.3.4 Mechanical Hazards



 **WARNING:** Use proper technique when lifting the instrument to minimize the risk of injury. Two or more people should lift from beneath the instrument. Contact MSD Instrument Service before attempting to move an instrument. Instrument weights are shown in Table 3.2.


TABLE 3.2. Instrument Weights

Instrument	Weight
MESO SECTOR S 600MM	124 lb (56 kg)
MESO QuickPlex SQ 120MM	45 lb (20 kg)
MESO QuickPlex Q 60MM	36 lb (17 kg)

 **WARNING:** Labels are affixed to the MESO SECTOR S 600MM elevator platforms indicating potential mechanical hazards. Unplug the power cord before putting hands near parts labeled with this warning.




 **WARNING:** Keep fingers and loose clothing away from moving parts. To avoid injury, do not touch any part of an instrument while it is in operation. Do not place fingers in the plate stacker or the plate carrier when an instrument is in operation.

 **WARNING:** Moving parts can be damaged or become misaligned when exposed to strong mechanical force. As with any mechanical instrument, take precautions when operating an MSD instrument, including:

- Do not wear loose garments or jewelry that could catch in moving mechanisms.
- Operate the instrument with the cover intact.
- Keep hands away from pathways of moving parts during operation.
- Do not attempt electrical or mechanical repairs.
- Do not bump into, lean on, or place any objects on top of the instrument.

3.3.5 Electrostatic Discharge Sensitivity


The MESO SECTOR S 600MM, MESO QuickPlex SQ 120MM, and MESO QuickPlex Q 60MM instruments contain sensitive electronics and can be damaged if exposed to electrostatic discharges in excess of 4.0 kV. While the instruments comply with Electrostatic Discharge (ESD) standards for this type of laboratory equipment, MSD recommends standard precautions to minimize ESD (e.g., 30–80% non-condensing humidity). In typical laboratory environments, electrostatic discharge should not be a problem.


 **CAUTION:** The electronic test plate provided with the instrument is susceptible to damage from electrostatic discharge. Avoid touching the metal contacts on the bottom of the plate. Store the plate in its supplied case when not in use.

3.3.6 Electromagnetic Interference and Susceptibility

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. The equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause interference, in which case users will be required to correct the interference at their own expense.


Changes or modifications not expressly approved by MSD may void the warranty. The operator must use any accessories provided with the equipment such as the power supply or shielded cables that are necessary for compliance with FCC standards.


 **CAUTION:** MSD instruments are tested for operation in a controlled electromagnetic environment. Transmitters of RF energy such as mobile (cellular) telephones should not be used in close proximity.

 **CAUTION:** To avoid interference from electrical transients, connect all system power cords to the same circuit. Plug the power cords for the instrument, the computer, and any other components connected to the computer, such as printers and monitors, into outlets on the same surge protector or UPS. If a UPS is available and has surge-only outlets, only use the outlets with battery back-up.

3.4 Decontamination Before Shipping or Servicing

MSD instruments may be used to analyze infectious materials or used in an environment where infectious materials are handled. For the protection of future users and service personnel, please follow site safety procedures and the directions of the site safety officer to disinfect the instrument. If shipping to MSD, contact MSD Instrument Service to determine the level of decontamination required.

 **WARNING:** Follow site safety procedures and the directions of the site safety officer to determine decontamination requirements for the instrument before shipping or service.

 **WARNING:** Prior authorization must be obtained before instrument and instrument accessories are shipped to MSD. Authorization is contingent upon completion of the MSD Instrument Decontamination Certification Form and issuance of a Returned Merchandise Authorization (RMA) number by MSD Instrument Service. Always ensure compliance with relevant transportation and other regulations prior to shipment.

4 Technical Support

MSD provides excellent and timely support for all authorized users of MSD instruments. We welcome and carefully consider all bug reports and suggestions for improvements to future versions. We will work with you to resolve any problems you may encounter.

4.1 Feedback

Please send comments or feedback on the software to MSD Scientific Support at scientificsupport@mesoscale.com.

4.2 Troubleshooting

For issues encountered when using MSD instruments, contact Scientific Support.

4.3 Contact Information

Meso Scale Diagnostics, LLC. company headquarters is located at:

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For Research Use Only. Not for use in diagnostic procedures.

