May 2020

Product Sheet

Rotor-Disc® Heat Sealer

For sealing Rotor-Discs for use with the Rotor-Gene® Q

The Rotor-Disc Heat Sealer is used to seal Rotor-Discs for the Rotor-Gene Q. Rotor-Discs do not use caps. Instead, Rotor-Disc Heat Sealing Film is applied and sealed using the Rotor-Disc Heat Sealer. The film prevents contamination by providing a strong, durable, and tamper-proof seal. A Rotor-Disc 72 Loading Block or a Rotor-Disc 100 Loading Block is required.

Safety information

This product sheet contains information about warnings and cautions that must be followed by the user to ensure safe operation of the Rotor-Disc Heat Sealer and to maintain the instruments in a safe condition. If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

The following safety conventions are used in this product sheet:

WARNING

The term WARNING is used to inform you about situations that could result in **personal injury** to other persons.

Details about these circumstances are given in a box like this one.

CAUTION

The term CAUTION is used to inform you about situations that could result in **damage to an instrument** or other equipment.

Details about these circumstances are given in a box like this one.

The advice given in this product sheet is intended to supplement, not supersede, the normal safety requirements prevailing in the user's country.

WARNING **Risk of personal injury**

The Rotor-Disc Heat Sealer operates at high temperatures (165–182°C, 329–360°F). To avoid burn injury, never place a hand or finger into the loading space at the front of the Rotor-Disc Heat Sealer.

WARNING **Risk of personal injury**

Remove the loading block from the Rotor-Disc Heat Sealer when the beep sounds at the end of sealing. The loading block should not be left inside the Rotor-Disc Heat Sealer once sealing of the Rotor-Disc is complete. Leaving the loading block in the Rotor-Disc Heat Sealer can make it extremely hot. If this occurs, turn the Rotor-Disc Heat Sealer off and allow to cool for at least 30 minutes before attempting to handle the loading block.

CAUTION **Risk of material damage**

To ensure proper ventilation and access to controls, maintain a minimum clearance of 10 cm at the sides and rear of the Rotor-Disc Heat Sealer.

CAUTION **Risk of material damage**

For disconnection of power, unplug the appliance coupler on the back panel of the Rotor-Disc Heat Sealer.

Symbols on the Rotor-Disc Heat Sealer

Hot surface inside symbol — to avoid burn injury, do not place a hand or finger into the loading space at the front of the Rotor-Disc Heat Sealer.

Pinch point; can cause severe personal injury symbol — take care when operating the Rotor-Disc Heat-Sealer to avoid trapping hands or fingers.

Biological Safety

Specimens and reagents containing materials from biological sources should be treated as potentially infectious. Use safe laboratory procedures as outlined in publications such as Biosafety in Microbiological and Biomedical Laboratories, HHS **(www.cdc.gov/od/ohs/biosfty/biosfty.htm).**

Samples

Samples may contain infectious agents. You should be aware of the health hazard presented by such agents and should use, store, and dispose of such samples according to the required safety regulations.

WARNING **Samples containing infectious agents**

Some samples used with this instrument may contain infectious agents. Handle such samples with the greatest of care and in accordance with the required safety regulations.

Always wear safety glasses, 2 pairs of gloves, and a lab coat.

The responsible body (e.g., laboratory manager) must take the necessary precautions to ensure that the surrounding workplace is safe and that the instrument operators are suitably trained and not exposed to hazardous levels of infectious agents as defined in the applicable Safety Data Sheets (SDSs) or OSHA,* ACGIH,† or COSHH‡ documents.

Venting for fumes and disposal of wastes must be in accordance with all national, state and local health and safety regulations and laws.

*OSHA: Occupational Safety and Health Administration (United States of America).
†ACGIH: American Conference of Government Industrial Hygienists (United States of America).
‡COSHH: Control of Substances Hazardous to Health (United Kingdom).

Technical assistance

At QIAGEN, we pride ourselves on the quality and availability of our technical support. Our Technical Services Departments are staffed by experienced scientists with extensive practical and theoretical expertise in molecular biology and the use of QIAGEN products. If you have any questions or experience any difficulties regarding the Rotor-Gene Q MDx or QIAGEN products in general, do not hesitate to contact us.

QIAGEN customers are a major source of information regarding advanced or specialized uses of our products. This information is helpful to other scientists as well as to the researchers at QIAGEN. We therefore encourage you to contact us if you have any suggestions about product performance or new applications and techniques.

For technical assistance and more information, visit **support.qiagen.com**.

For up-to-date information about the Rotor-Gene Q MDx, visit **www.qiagen.com/products/rotor-geneqmdx.aspx.**

Procedure

1. Switch on the Rotor-Disc Heat Sealer using the switch located on the back at the right-hand side. A red "Power" light illuminates. The Rotor-Disc Heat Sealer takes approximately 10 minutes to reach operating temperature, when a green "Ready" light illuminates.

   Note: Once the Rotor-Disc Heat Sealer is ready, it is safe to leave it running constantly.
2. Set the selector switch to "Permanent Seal" or "Removable Seal", as required.
3. Insert the Rotor-Disc into the Rotor-Disc Loading Block using the position one tab on the Rotor-Disc and the tube guide holes on the Rotor-Disc Loading Block to ensure the correct orientation.

4. Set up reactions in the Rotor-Disc by manual pipetting or with a QIAgility® workstation.
5. Carefully remove the central portion from one sheet of Rotor-Disc Heat Sealing Film by slightly folding the film in half, pinching the center piece, and carefully tearing it out.
6. Place the film over the Rotor-Disc in the correct orientation as shown by the "SIDE UP" label. Ensure that the "SIDE UP" label is positioned at the bottom of the Rotor-Disc Loading Block. The central hole in the film should slide easily over the cylinder of the Rotor-Disc Loading Block and onto the top of the Rotor-Disc.

7. Slide the assembly into the Rotor-Disc Heat Sealer using the guide rails on the side of the Rotor-Disc Loading Block. Ensure that the Rotor-Disc Loading Block is pushed in completely.

8. To activate the sealing mechanism, first press down on the blue anodized bar at the top of the Rotor-Disc Heat Sealer, and then push back the black catch.

   When the sealing mechanism has lowered, an orange "Sealing" light illuminates. If the Rotor-Disc Loading Block is not in the correct position, a warning beep sounds.

9. When sealing is finished, a long beep sounds and the orange "Ready" light starts blinking. Press down on the blue anodized bar to raise and lock the sealing mechanism back in its original position. Do not continue sealing for any longer than indicated by the beep or the Rotor-Disc may deform.
   If the Rotor-Disc Loading Block is not removed, the orange "Sealing" light will illuminate permanently and the beep sound starts to alert as a reminder.
10. Slide the Rotor-Disc Loading Block out of the Rotor-Disc Heat Sealer. Allow the film to cool for approximately 10 seconds. Remove the excess sealing film by pushing it down to detach. Do not pull the excessive film upwards.
11. Remove the Rotor-Disc from the Rotor-Disc Loading Block.
12. Load the Rotor-Disc into the rotor using the position one locator tab as a guide to the correct orientation.

Maintenance procedures

Maintaining the working performance of the Rotor-Disc Heat Sealer is easy. It can be cleaned by wiping the outer surfaces with a lint-free cloth dampened (but not dripping) with a 0.1% (v/v) bleach solution. Please ensure the instrument has been switched off and is cool when performing any maintenance procedures and that the heating assembly

- Wipe the chamber with a lint-free cloth dampened with PCR-grade water to remove traces of bleach.
- When working with chemicals, always wear a suitable lab coat, disposable gloves, and protective goggles. For more information, consult the appropriate safety data sheets (SDSs), available from the product supplier.

Appendix A

Technical Data

QIAGEN reserves the right to change specifications at any time.

Environmental Conditions

Operating Conditions

Power	100V/230 V AC, 50/60Hz, 300 VA (peak) Mains supply voltage fluctuations are not to exceed 10% of the nominal supply voltages.
Fuse	F5A 250 V fuse
Overvoltage category	II
Air temperature	18 to 30°C (64 to 86°F)
Relative humidity	10–75% (noncondensing)
Altitude	Up to 2000 m (6500 ft.)
Place of operation	For indoor use only
Pollution level	2
Environmental class	3K2 (IEC 60721-3-3) 3M2 (IEC 60721-3-3)

Transportation Conditions

Air temperature	–25°C to 60°C (–13°F to 140°F) in manufacturer's package
Relative humidity	Max. 75% (noncondensing)
Environmental class	2K2 (IEC 60721-3-2)

Storage Conditions

Air temperature	15°C to 30°C (59°F to 86°F) in manufacturer's package
Relative humidity	Max. 75% (noncondensing)
Environmental class	1K2 (IEC 60721-3-1)

Ordering Information

Related Products	Contents	Cat. no.
Rotor-Disc Heat Sealer	Heat sealing instrument for use with Rotor-Discs	Inquire
Rotor-Disc 72 Starter Kit	3 Rotor-Disc 72 packs, Rotor-Disc Heat Sealer, Rotor-Disc Heat Sealing Film, Rotor-Disc 72 Rotor and Locking Ring, Rotor-Disc 72 Loading Block, Rotor-Disc Pipetting Aid	Inquire
Rotor-Disc 100 Starter Kit	2 Rotor-Disc 100 packs, Rotor-Disc Heat Sealer, Rotor-Disc Heat Sealing Film, Rotor-Disc 100 Rotor and Locking Ring, Rotor-Disc 100 Loading Block, Rotor-Disc Pipetting Aid	Inquire
Rotor-Disc Heat Sealing Film (60)	60 films for sealing Rotor-Discs	981601
Rotor-Disc Heat Sealing Film (600)	10 x 60 films for sealing Rotor-Discs	981604
Rotor-Disc 72 (24)	24 individually wrapped discs for 1728 reactions	981301
Rotor-Disc 72 (240)	10 x 24 individually wrapped discs for 17,280 reactions	981303
Rotor-Disc 100 (30)	30 individually wrapped discs for 3000 reactions	981311
Rotor-Disc 100 (300)	10 x 30 individually wrapped discs for 30,000 reactions	981313

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at www.qiagen.com or can be requested from QIAGEN Technical Services or your local distributor.

Revision History

Date	Changes
May 2020	Updated safety information; added Biological safety section; added Technical assistance section; added Maintenance procedures; Added Appendix A; layout updates.