

# How to Use MicroAmp™ Reaction Plates, Tube Strips, and Tubes

For use with: Applied Biosystems™ thermal cyclers and real-time PCR systems

Publication Number 100033471 Revision A

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## How to use MicroAmp™ plates

### MicroAmp™ plates and accessories

This table is representative of available plastics and other consumables. For a complete list, refer to <http://www.lifetechnologies.com/us/en/home/life-science/pcr/pcr-plastics.html>.

Item	Cat. no. (Quantity)
MicroAmp™ EnduraPlate™ Optical 96-Well Reaction Plate PCR volume range: 10–100 µL (25 µL recommended) Capacity: 200 µL	<ul style="list-style-type: none"> <li>• 4483354 (20 plates; clear)</li> <li>• 4483343 (20 plates; blue)</li> <li>• 4483349 (20 plates; green)</li> <li>• 4483350 (20 plates; red)</li> <li>• 4483395 (20 plates; yellow)</li> <li>• 4483355 (5 plates; assorted colors)</li> <li>• 4483352 (500 plates; clear)</li> <li>• 4483356 (500 plates; assorted colors)</li> </ul>
MicroAmp™ Optical 96-Well Reaction Plate with Barcode	<ul style="list-style-type: none"> <li>• 4306737 (20 plates)</li> <li>• 4326659 (500 plates)</li> </ul>
MicroAmp™ Optical 96-Well Reaction Plate with Barcode and Optical Adhesive Films	4314320 (100 plates)
MicroAmp™ Optical 96-Well Reaction Plate	<ul style="list-style-type: none"> <li>• 4316813 (500 plates)</li> <li>• N8010560 (10 plates)</li> </ul>
MicroAmp™ Optical 8-Cap Strips	4323032 (300 strips)
MicroAmp™ 12-Cap Strip	<ul style="list-style-type: none"> <li>• N8010534 (200 strips)</li> <li>• N8011534 (1,000 strips)</li> </ul>

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

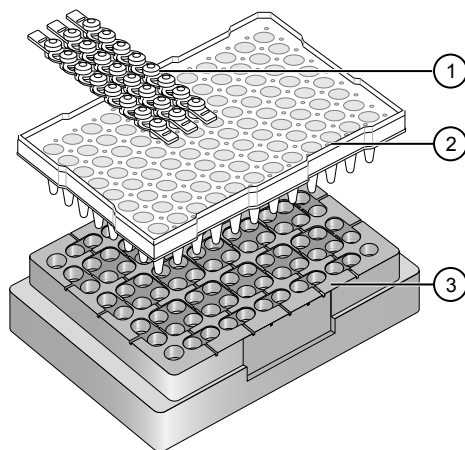
Item	Cat. no. (Quantity)
MicroAmp™ 8-Cap Strip, clear	N8010535 (300 strips)
MicroAmp™ 8-Cap Strip, assorted colors	N8010835 (300 strips of assorted colors)
MicroAmp™ 12-Cap Strip, assorted colors	N8010834 (200 strips of assorted colors)
MicroAmp™ Clear Adhesive Film	4306311 (100 films)
MicroAmp™ Optical Adhesive Film	<ul style="list-style-type: none"> <li>• 4311971 (100 films)</li> <li>• 4360954 (25 films)</li> </ul>
MicroAmp™ Splash Free 96-Well Base	4312063 (10 bases)
MicroAmp™ Adhesive Film Applicator	4333183 (5 applicators)
MicroAmp™ Cap Installing Tool (Handle)	4330015 (1 tool)

### Fill, seal, and load reaction plates

1. Place the reaction plate on a splash-free 96-well base.
2. Pipette the samples into the sample wells.
3. Seal the plates using one of the following:
  - MicroAmp™ Cap Strips. See “Seal plates with cap strips” on page 2.
  - MicroAmp™ Adhesive Film. See “Seal plates with adhesive covers” on page 3.
4. Place the sealed reaction plate into the instrument without the splash-free base.

### Seal plates with cap strips

1. Align and place the MicroAmp™ Cap Strip on the appropriate wells on the MicroAmp™ Optical 96-Well Reaction Plate.



- ① MicroAmp™ 8-Cap Strip
- ② MicroAmp™ Optical 96-Well Reaction Plate 0.2-mL
- ③ MicroAmp™ Splash Free 96-Well Base

2. Seal the cap strips using the rocking capping tool:



- a. Slip your fingers through the handle with the holes in the tool facing down.
- b. Place the holes in the tool over the first eight caps in a row.
- c. Rock the tool back and forth a few times to seal the caps.
- d. Repeat for remaining caps in the row, then for all remaining rows.

### Seal plates with adhesive covers

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**IMPORTANT!** Apply significant downward pressure on the applicator in all steps to form a complete seal on top of the wells. Pressure is required to activate the adhesive on the optical cover.

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1. Remove the backing of the adhesive film.
2. Align the adhesive film so as to cover all wells while placing on the plate, then rub the flat edge of the applicator back and forth along the long edge of the plate.



3. Rub the flat edge of the applicator back and forth along the short edge (width) of the plate.



4. Rub the end of the applicator horizontally and vertically between all wells.

- Rub the end of the applicator around all outside edges of the plate using small back and forth motions to form a complete seal around the outside wells.



## How to use MicroAmp™ tube strips

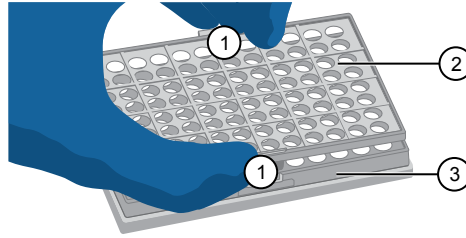
### MicroAmp™ tube strips and accessories

This table is representative of available plastics and other consumables. For a complete list, refer to <http://www.lifetechnologies.com/us/en/home/life-science/pcr/pcr-plastics.html>.

Consumables	Cat. no. (Quantity)
MicroAmp™ 8-Tube Strip (0.2 mL) PCR volume range: 10–100 µL (25 µL recommended) Capacity: 200 µL	<ul style="list-style-type: none"> <li>N8010580 (125 tube strips)</li> <li>N8010838 (120 tube strips; assorted colors)</li> </ul>
MicroAmp™ 96-Well Tray/ Retainer Set Capacity: 96 wells	4381850 (10 tray/retainer sets)
MicroAmp™ 8-Cap Strip Natural color, dome cap.	N8010535 (300 strips)
MicroAmp™ 8-Cap Strip, assorted colors Assorted color, dome cap.	N8010835 (300 strips)
MicroAmp™ Splash Free 96-Well Base	4312063 (10 bases)
MicroAmp™ Cap Installing Tool (Handle)	4330015 (1 tool)

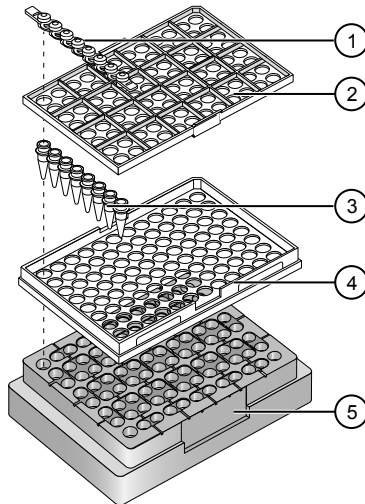
## Fill, seal, and load tube strips

1. Separate the tray from the retainer by releasing the catch as indicated in the graphic.



- ① Release catch
- ② MicroAmp™ 96-Well Retainer
- ③ MicroAmp™ 96-Well Tray

2. Place the tray on the splash-free 96-well base.
3. Load the tube strips on the tray.
4. Place the retainer over the tubes.
5. Pipette the sample into the tubes.
6. Seal the tube strip using the MicroAmp™ strip caps. See “ Seal tubes strips with cap strips” on page 6 for instructions.
7. Remove the splash-free base and place the sealed tube strips along with the retainer into the instrument.



- ① MicroAmp™ 8-Cap strip
- ② MicroAmp™ 96-Well Retainer
- ③ MicroAmp™ 8-Tube Strip (0.2-mL) or MicroAmp™ Reaction Tube without Cap (0.2-mL)
- ④ MicroAmp™ 96-Well Tray
- ⑤ MicroAmp™ Splash Free 96-Well Base

## Seal tubes strips with cap strips

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**IMPORTANT!** Apply significant downward pressure on the sealing tool in all steps to form a complete seal on top of the tubes.

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1. Align and place the cap strips on the tubes.
2. Seal the cap strips using the rocking capping tool:



- a. Slip your fingers through the handle with the holes in the tool facing down.
- b. Place the holes in the tool over the first eight caps in a row.
- c. Rock the tool back and forth a few times to seal the caps.
- d. Repeat for remaining caps in the row, then for all remaining rows.

## How to use MicroAmp™ tubes

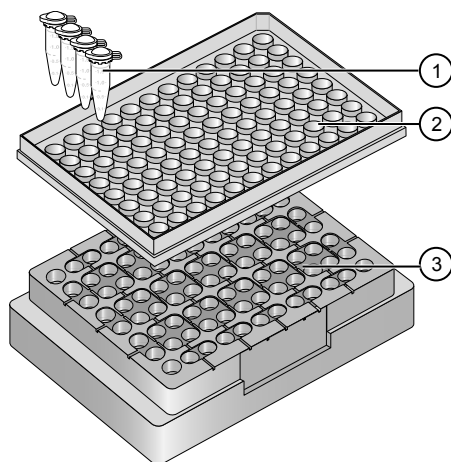
### MicroAmp™ tubes and accessories

This table is representative of available plastics and other consumables. For a complete list, refer to <http://www.lifetechnologies.com/us/en/home/life-science/pcr/pcr-plastics.html>.

Consumables	Cat. no. (Quantity)
MicroAmp™ 96-Well Tray for VeriFlex™ Systems Capacity: 96 wells	4379983 (10 trays)
MicroAmp™ Reaction Tubes with Cap (0.2 mL) PCR volume range: 10–100 µL (25 µL recommended) Capacity: 200 µL	<ul style="list-style-type: none"><li>• N8010540 (1,000 tubes)</li><li>• N8011540 (10,000 tubes)</li><li>• N8010840 (1,000 tubes; assorted colors)</li><li>• N8010612 (1,000 tubes; autoclaved)</li></ul>
MicroAmp™ Multi-Removal Tool	4313950 (1 tool)
MicroAmp™ Splash Free 96-Well Base	4312063 (10 bases)

## Fill, seal, and load tubes

1. Set the 96-well tray on a splash-free 96-well base.
2. Place the reaction tubes in the tray.



- ① MicroAmp™ Reaction Tube with Cap (0.2-mL)
- ② MicroAmp™ 96-Well Tray for VeriFlex™ Blocks
- ③ MicroAmp™ Splash Free 96-Well Base

3. Pipette the samples into the reaction tubes.
4. Cap the tubes.
5. Place the sealed reaction tubes and tray into the instrument without the splash-free base.

## Limited product warranty

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