Instructions for use
Magnum FLX® magnetic adapter 96-well plate
English (EN)

Before using the accessories for the first time, read these instructions for use. Also read the operating manual of the device the accessories are used with.

1 Product description

![Fig. 1: Magnum FLX magnetic adapter 96-well plates](image)

The Magnum FLX magnetic adapter 96-well plates is a ring magnet plate. The Magnum FLX magnetic adapter 96-well plates is used to isolate magnetic beads in a suspension and to remove washing solution.

Labware containing a bead suspension is placed on the magnetic adapter. The magnetic adapter has 96 strong ring magnets. The ring magnets cause the beads to settle on the tube inner wall after an incubation period. The beads form a ring at magnet level. The sample supernatant is aspirated below the bead ring using a pipette tip without aspirating the beads.

The following plates can be inserted in the Magnum FLX magnetic adapter 96-well plates:
- Standard plates
- Deepwell plates
- Plates with round bottoms and V-bottoms
- PCR plates (skirted, semi-skirted, unskirted)

The Magnum FLX magnetic adapter 96-well plates must not be tempered.

The Magnum FLX magnetic adapter 96-well plates is not intended to be transported by the gripper. Any plates that are on the magnetic adapter are transported using the gripper.
Instructions for use
Magnum FLX® magnetic adapter 96-well plate
English (EN)

2 Safety
2.1 Intended use
The Magnum FLX magnetic adapter 96-well plates is used for the quick and efficient settling of magnetic particles from liquid columns up to a height of 40 mm. It can be used for working volumes >10 µL.

The Magnum FLX magnetic adapter 96-well plates may only be used for research purposes. The Magnum FLX magnetic adapter 96-well plates may not be used for diagnostic procedures.

2.2 Warnings for intended use

WARNING! Strong magnetic field on Magnum FLX magnetic adapter 96-well plates
Magnetic fields affect the function of pacemakers and defibrillators.
- If you have a pacemaker or defibrillator, avoid contact with the Magnum FLX magnetic adapter 96-well plates.

WARNING! Risk of crushing due to strong magnetic field
Every Magnum FLX magnetic adapter 96-well plates has a strong magnetic field. If the distance between the magnetic adapter and other magnetizable materials is <10 cm they will attract each other very quickly and very strongly. They are then very difficult to separate. Any limbs caught between the magnets may get seriously injured.
Examples for magnetizable materials: other magnetic adapters, steel surfaces, other magnets.
- Make sure that there is a minimum distance of 10 cm between the magnetic adapter and the tool holder, carrier and rear panel of the device.
- Only use the magnetic adapter as described in the instructions for use.

CAUTION! Skin irritation from nickel
The magnets of the Magnum FLX magnetic adapter 96-well plates are plated with Ni-Cu-Ni. Ni-Cu-Ni can trigger an irritation of the skin.
- If you are allergic or sensitive to nickel, avoid contact with the Magnum FLX magnetic adapter 96-well plates.
- Wash irritated skin with soap and water.
- Contact a physician, if required.
2.3 Warning symbols on the device

**WARNING**

**STRONG MAGNETIC FIELD**

Persons with a pace maker/implantable cardioverter defibrillator (ICD) should avoid any contact with this product.

---

3 Operation

If warped labware is placed on the magnetic adapter, the magnetic beads may end up on the magnetic adapter.

4 Maintenance

**NOTICE! Material damage due to incorrect decontamination agent**

If you decontaminate the Magnum FLX magnetic adapter 96-well plates using bleach or other organic oxidizing agents, this will cause severe damage to magnets and carriers.

- Decontaminate the Magnum FLX magnetic adapter 96-well plates using a 70% ethanol solution and an ortho-phthalaldehyde-based solution.

4.1 Decontamination using a 70% ethanol solution

The Magnum FLX magnetic adapter 96-well plates must be decontaminated before and after each use using a 70% ethanol solution.

**Prerequisites**

- Solution with 70% ethanol
- Lint-free cloths
- Cotton swabs

1. Moisten the lint-free cloth and cotton swab with ethanol solution.
2. Use the lint-free cloth to clean the surfaces.
3. Use the cotton swab and compressed air to remove strong salt encrustations.
4. Dry the magnetic adapter well using a dry cloth or compressed air.
4.2 Decontamination using an ortho-phthalaldehyde-based solution

Prerequisites
- Ortho-phthalaldehyde-based solution, e.g. CIDEX.

1. Decontaminate the Magnum FLX magnetic adapter 96-well plates according to the instructions of the manufacturer of the decontamination agent.
2. After decontaminating the magnetic adapter with the ortho-phthalaldehyde-based solution, decontaminate it using a 70% ethanol solution.

4.3 Autoclaving

The Magnum FLX magnetic adapter 96-well plates cannot be autoclaved.

5 Transport, storage and disposal

- Store and transport the Magnum FLX magnetic adapter 96-well plates only in its original packing.
- Dispose of the Magnum FLX magnetic adapter 96-well plates in accordance with legal requirements.

6 Technical data

| Operating temperature | 80 °C maximum |

7 Ordering information

<table>
<thead>
<tr>
<th>Order no. (International)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5075 751.836</td>
<td>Magnum FLX magnetic adapter 96-well plates</td>
</tr>
</tbody>
</table>

8 Trademarks and patents

Magnum FLX® is a registered trademark of Alpaqua Engineering, LLC, USA. Used by permission.

epMotion® is a registered trademark of Eppendorf AG, Germany.

Registered trademarks and protected trademarks are not marked in all cases with ® or ™ in this manual.

Protected by U.S. Patent Nos 6,755,384 and 9,663,780