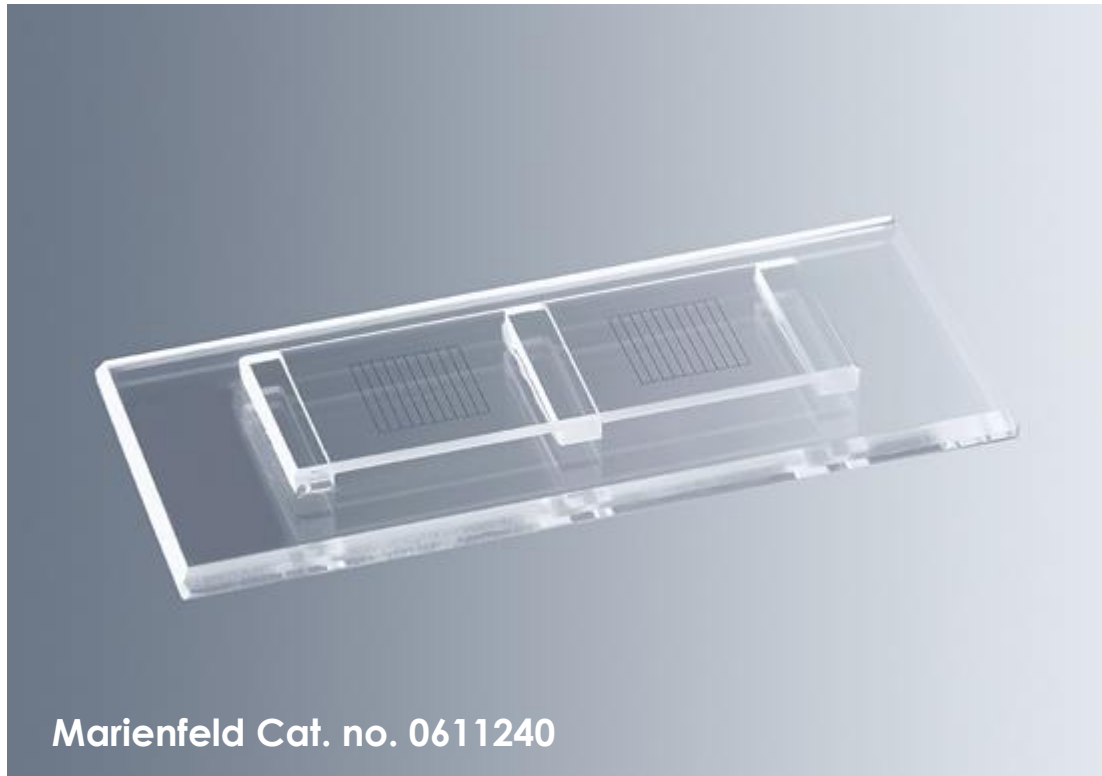




McMaster Counting chambers with 2 grids

McMaster counting chambers are used for counting worm eggs. They consist of a basis plate and a cover glass which is affixed on 3 supports and bears 2 counting grids.



Technical data:

Size of the counting chamber:	approx. 75x32 mm
Dimensions of the grids:	approx. 10x10 mm
Division of the grids:	by vertical lines into 10 parts
Distance between bottom plate and cover glass:	approx. 1.5 mm
Volume of the suspension:	2 x 0.15 ml

Principle:

Using a standardized amount of faeces and flotation fluid, a faecal suspension is prepared and the worm eggs can be calculated after the count under the microscope.



Preparation and counting:

1. Weight 4 grams of faeces and mix together with saturated saline solution in a mortar.
2. Filter the faecal suspension through a tea strainer and a funnel into a graduated cylinder. Now wash the residue in the tea strainer with a vigorous jet of saturated saline solution using a squeeze bottle until the cylinder is filled with 60 ml.
3. Remove the tea strainer and the funnel.
4. Mix the suspension in the cylinder thoroughly by blowing in air using a pipette and a pipetting aid.
5. Take out 2-3 ml of the suspension immediately (!) after mixing using a Pasteur pipette and fill one counting area of the McMaster chamber.
6. Mix the remaining liquid in the cylinder again and fill the other counting area of the chamber immediately.
7. Allow the chamber to stand for 5 minutes to allow the eggs to float to the surface.
8. Count the eggs lying within the grid, ignoring those outside the squares, at 100x to 400x magnification under a transmitted-light microscope.
9. The sum of the counted eggs in the 0.3 ml suspension (2x0.15 ml) represents 1/200 of the 60 ml suspension prepared in which 4 g faeces are included. You can now calculate the number of worm eggs included in 1 gram faeces. For example:
 Counting field 1 contains 12 worm eggs
 Counting field 2 contains 14 worm eggs = total 26 worm eggs in 0.3 ml suspension
 Consequently the 60 ml suspension with 4 g faeces contains approx. 5200 worm eggs which means that 1 gram faeces contains approx. 1300 worm eggs

Cleaning:

McMaster counting chambers are high-quality products consisting of different glass parts and must be handled and serviced with care:

1. Cleaning of the glass parts should be done with tempered water. The parts should not undergo a contrast bath (hot or cold).
2. The glass parts can be cleaned with disinfectants.
3. The parts bearing the grids should not be in water longer than 30 minutes.
4. Do not use solvents or acids.
5. The counting chambers must not be autoclaved!