

Medonic M-Series

Intended Use

The Boule Cleaning Kit is intended for use with the Medonic M-Series Hematology Systems. The kit contains 3 different cleaning solutions as indicated on their labels. Using this cleaning kit at the stated regular intervals will ensure:

- Longer lifetime of instrument tubing
- Lower risk of bacterial growth
- Lower background counts
- Increased mean time between failure (higher MTBF)

Contents

1. Enzymatic Cleaner, 450 mL, blue-colored solution
2. Hypochlorite Cleaner; 450 mL, yellow-colored solution
3. Detergent Cleaner, 450 mL, red-colored solution

The contents can be used for three full and complete cleaning cycles. Remaining cleaning solution should be disposed of.

Storage and stability

The Boule Cleaning kit can be transported at ambient temperature (avoid freezing, allow adaption to room temperature before use). Always store the bottles in an upright position to avoid any leakage from the cap.

Cleaning Interval

It is recommended to use the cleaning kit at the following time intervals:

- | | | |
|--------------------------|---|----------------|
| Less than 50 samples/day | → | every 6 months |
| More than 50 samples/day | → | every 3 months |
| 100-200 samples/day | → | every month |

Procedure

It is very important that the cleaning procedure is performed in the correct order (*or it may result in high PLT background counts*). The following order must be followed:

- 1) Enzymatic Cleaner (enzyme solution - blue cap)
- 2) Hypochlorite (2% solution - white cap)
- 3) Detergent Cleaner (detergent solution - red cap)

Proceed as follows:


1. Firstly, remove the diluent and lyse level sensors from their containers.
2. Press [MENU] on the touch screen, then [ADVANCED], then [MAINTENANCE], and then [CLEANING MENU] to enter the Cleaning Menu.
3. Press [CLEAN CYCLE EMPTY] and wait for the system to empty.
4. Wet a soft tissue with the proper cleaning solution (*e.g. the first time use Enzymatic Cleaner*) and wipe both level sensors clean on the outside. Then insert both level sensors directly into the cleaning solution bottle.
5. From Cleaning Menu press [CLEAN CYCLE FILL]. Allow the system to fill up with the cleaning solution and wait 15-30 minutes for the cleaner to work.

6. Remove both level sensors and press [CLEAN CYCLE EMPTY]. Allow the system to empty completely.
7. Repeat step 4 to 6 using the Hypochlorite (white) followed by the Detergent Cleaner (red).
8. Finally take a soft tissue and wet it with Diluent (**not** Lyse) and wipe off any remaining cleaner from the level sensors. Make sure that a soft and dry tissue is used to dry the level sensors from all remaining liquid. When level sensors are clean insert both back into the original reagent containers. (Be sure not to interchange the Diluent and Lyse level sensors.)
9. From Cleaning Menu press [CLEAN CYCLE FILL], wait until this cycle is completed.
10. The background count should not exceed the recommended values, which is stated in the User manual. Perform a minimum of 3 background counts before analyzing the next sample.

Notes

- As the volume in the cleaning bottles will decrease during the cleaning cycles, be sure to secure the bottles to avoid tilting.
- During the described cleaning process above, some foaming might occur on the aspiration needle. Remove foam with a soft tissue.
- In case of heavy contaminated systems, it is recommended to warm the detergent to 45-55 °C prior to cleaning the system.
- Only the Hypochlorite Cleaner has the ability to act as a disinfectant, significantly reducing the number of viable microorganisms.
- It is recommended to check calibration by running a control after cleaning.

Precautions

- Boule Hypochlorite Cleaner (2%) contains sodium hypochlorite (2%). The solution is skin irritating and causes serious eye irritation. It is marked with a hazard pictogram.  The other two solutions do not contain chemicals at a level considered to be hazardous to health. However, all solutions should be handled with proper care, and skin and eyes should be protected. Please read the SDS before use. Since hypochlorite solutions are oxidizing with a basic pH, avoid contact with materials other than those indicated in the instructions (spills give a remaining smell on e.g. skin and stains (bleaching) on clothes etc).
- The concentration of hypochlorite decreases with time without invalidation of the functionality within the given expiry. Close the container as soon as possible after use.
- Cleaners should only be used before stated expiration date. The cleaners should be disposed of according to local regulations. When draining through the sewage system, always use plenty of water.

ORDERING INFORMATION AND SERVICE

Contact your local distributor for orders and support. Please have the product number ready for orders. For other assistance contact Boule Medical AB at phone +46 8 7447700, fax +46 8 7447720 or info@boule.com

For translation of this instruction and explanation to symbols see www.medonic.se/support/.

Ordering no:	Description
501-036	Boule Cleaning Kit

Packaging
3 x 450 ml



Medonic CA620

Intended use

The Boule Cleaning Kit is intended for use with the Medonic Hematology Systems CA620. The kit contains 3 different cleaning solutions as indicated on their labels. Using this cleaning kit at the stated regular intervals will ensure:

- Longer life time of instrument tubing
- Lower bacterial grow risk
- Lower background counts
- Increased mean time between failure (higher MTBF)

Contents

1. Enzymatic Cleaner, 450 mL, blue-colored solution
2. Hypochlorite Cleaner; 450 mL, yellow-colored solution
3. Detergent Cleaner, 450 mL, red-colored solution

The contents can be used for three full and complete rinsing cycles. Remaining cleaning solution should be disposed of.

Storage and stability

The Boule Cleaning kit can be transported at ambient temperature (avoid freezing, allow adaption to room temperature before use). Always store the bottles in an upright position to avoid any leakage from the cap.

Cleaning interval

It is recommended the following time intervals:

Less than 50 samples/day	→	every 6 months
More than 50 samples/day	→	every 3 months
100-200 samples/day	→	every month

Procedure

It is most important that the cleaning procedure is performed in the correct order (*or it may result in high PLT background count*).

The following order must be followed:

- 1) Enzymatic Cleaner (enzyme solution - blue cap)
- 2) Hypochlorite (2% solution - white cap)
- 3) Detergent Cleaner (detergent solution - red cap)

Proceed as follows:


1. Firstly, remove the diluent and lyse probes from their containers. (Note. Do NOT use any of the Cleaning Kit solutions in the Detergent inlet. The Detergent probe shall be left in its container during this whole procedure.)
2. Go to menu 8.3 'Empty System' and press <ENTER>. Wait for the system to empty.
3. Wet a soft tissue with the proper cleaning solution (*e.g. the first time use Enzymatic Cleaner*) and wipe both level sensors clean on the outside. Then insert both level sensors directly into the cleaning solution bottle.
4. Go to menu 8.2 'Fill System' followed by <ENTER>. Allow the system to fill up with the cleaning solution and wait 15-30 minutes for the cleaner to work.
5. Remove both probes and go to menu 8.3 'Empty System' and press <ENTER>. Allow the system to empty completely.

6. Repeat step 3 to 5 using the Hypochlorite (white) and then followed by using the Detergent cleaner (red).
7. Finally take a soft tissue and wet it with diluent (**not** lyse) and wipe off any remains of the cleaners from the probes. When probes are clean insert both back into the original reagent containers. (Be sure not to interchange the diluent and lyse probes.)
8. Go to menu 8.2 'Fill System' followed by <ENTER> and wait until this cycle is finished.
9. Go to menu 6.2 'HGB photometer adjustment' and press digit '1' on the keyboard for the photometer to automatically adjust and wait until this cycle is finished.
10. The background (blank) count should not exceed the recommended level as stated in the user's manual. Perform a minimum of 3 background (blank) counts before running the next sample.

Notes

- As the volume in the cleaning bottles will decrease during the cleaning cycles, be sure to secure the bottles to avoid tilting.
- During the described cleaning process above, some foaming might occur on the aspiration pipette; remove such with a soft tissue.
- In case of heavy contaminated systems, it is recommended to warm the detergent to 45-55 ° C prior to cleaning the system.
- Only the Hypochlorite Cleaner has the ability to act as a disinfectant, significantly reducing the number of viable microorganisms.
- It is recommended to check calibration by running a control after cleaning.

Precautions

- Boule Hypochlorite Cleaner (2%) contains sodium hypochlorite (2%). The solution is skin irritating and causes serious eye irritation. It is marked with a hazard pictogram.  The other two solutions do not contain chemicals at a level considered to be hazardous to health. However, all solutions should be handled with proper care, and skin and eyes should be protected. Please read the SDS before use. Since hypochlorite solutions are oxidizing with a basic pH, avoid contact with materials other than those indicated in the instructions (spills give a remaining smell on e.g. skin and stains (bleaching) on clothes etc).
- The concentration of hypochlorite decreases with time without invalidation of the functionality within the given expiry. Close the container as soon as possible after use.
- Cleaners should only be used before stated expiration date. The cleaners should be disposed of according to local regulations. When draining through the sewage system, always use plenty of water.

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Ordering no:	Description	Packaging
501-036	Boule Cleaning Kit	3 x 450 ml

