

User Manual

MELAdest® 65

Water distiller



EN

Dear customer,

We thank you for your confidence demonstrated by the purchase of this MELAG product. As an owner-run and operated family concern founded in 1951, we have a long history of successful specialization in hygiene products for practice-based use. Our focus on innovation, quality and the highest standards of operational reliability has established MELAG as the world's leading manufacturer in the instrument reprocessing and hygiene field.

You, our customer are justified in your demand for the best products, quality and reliability. Providing **“competence in hygiene”** and **“Quality – made in Germany”**, we guarantee that these demands will be met. Our certified quality management system is subject to close monitoring: one instrument to this end is our annual multi-day audit conducted in accordance with EN ISO 13485. This guarantees that all MELAG products are manufactured and tested in accordance with strict quality criteria.

The MELAG management and team.

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1 General guidelines




Please read this user manual carefully before commissioning the product. The manual includes important safety instructions. Failure to comply with the safety instructions can result in injury and/or damage to the product. Use the product only for the purpose specified in these instructions. Make sure that you always have access to digital or printed version of the user manual.

Should the manual no longer be legible, is damaged or has been lost, you can download a new copy from MELAG download centre at www.melag.com.

Symbols used

Symbol	Description
	Indicates a dangerous situation, which if not avoided, could entail slight to life-threatening injuries.
	Draws your attention to a situation, which if not avoided, could result in damage to the instruments, the practice fittings or the device.
	Draws your attention to important information.

Formatting rules

Symbol	Description
	Prerequisites for the following handling instruction.
	Refer to the glossary or another text section.
	Information for safe handling.

Disposal

MELAG devices are synonymous with high quality and a long life-span. When you eventually need to decommission your MELAG device, the required disposal of the device can take place with MELAG in Berlin. Simply contact your stockist.

Dispose of accessories and consumption media which you no longer require in the appropriate manner. Comply with all relevant disposal specification in terms of possibly contaminated waste.

The packaging protects the device against transport damage. The packaging materials have been selected for their environmentally-friendly disposability and can be recycled. Returning the packaging to the material flow reduces the amount of waste and saves raw materials.

2 Safety



When operating the device, comply with the following safety instructions as well as those contained in subsequent chapters.

Qualified personnel

- Only competent and trained personnel may use the product.

Repair

- Never open the device housing. Incorrect opening and repair can compromise electrical safety and pose a danger to the user.

3 Description of the device

Intended use

The MELAdest 65 water distiller enables the production of [▶distilled water](#). Water of drinking water quality is required as a prerequisite, e.g. tap water. The device does not provide germ-free water. MELAdest 65 is intended for use in the medical field, e.g. in medical and dental practices and other medical care facilities outside the patient environment.

Functional principle

When the device is activated, the water temperature increases and escaping gases are boiled, then led through an opening. The water temperature increases to 100 °C and begins to boil. During evaporation, the chemicals, salts and soiling remain in the container. The stream flows through the cooling coil system in the upper section where it cools and condenses into distilled water.

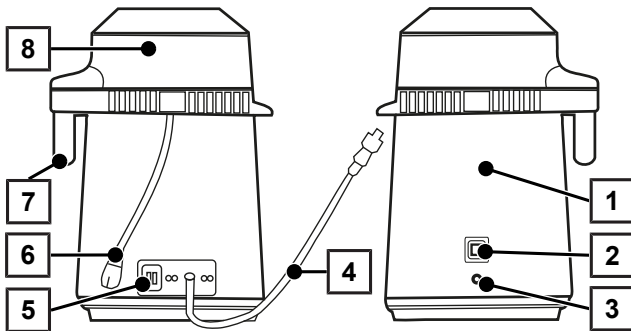
Scope of delivery

Please check the scope of delivery before setting up and connecting the device.

- MELAdest 65 water distiller
- User manual
- Power cable
- Glass flask
- Plastic guard ring
- Adapter cover
- Spout cover
- Holder for adapter cover
- Holder for spout cover

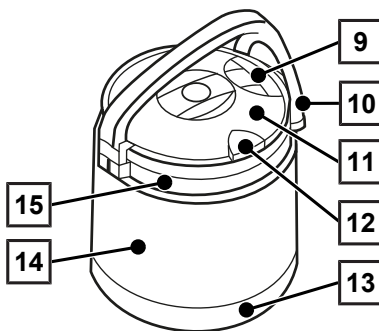
Views of the device

Water distiller



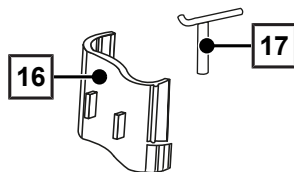
- 1 Distilling chamber
- 2 START/RESET button
- 3 Control lamp
- 4 Power cable
- 5 Socket for connection cable
- 6 Connection cable
- 7 Discharge opening
- 8 Upper section of the distilling chamber

Glass flask



- 9 Spout cover
- 10 Handle
- 11 Glass flask cover
- 12 Adapter cover
- 13 Plastic guard ring
- 14 Glass flask
- 15 Metal collar

Accessories



- 16 Holder for adapter cover
- 17 Holder for spout cover

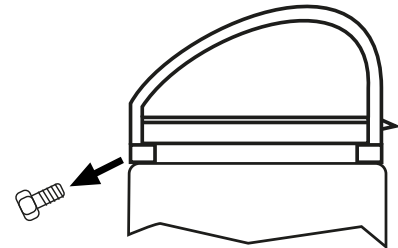
4 Commissioning

Fitting the glass flask

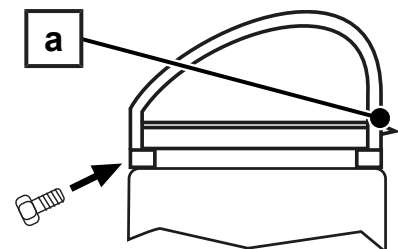
Comply with the following for safe handling:

- Check the device after unpacking for any damage suffered during transport.
- The device is not suitable for operation in explosive atmospheres.
- Install and operate the device in a frost-free environment.
- The device is conceived for use outside the patient area. The device should be located a minimum of 1.5 m radius away from the treatment area.

1. Remove the glass flask from the water distiller.
2. Remove all the individual parts from the glass flask carefully.
3. Remove the packaging from the individual parts.
4. Place the glass flask in the plastic guard ring.
5. Loosen a screw on the metal collar on the neck of the glass flask.

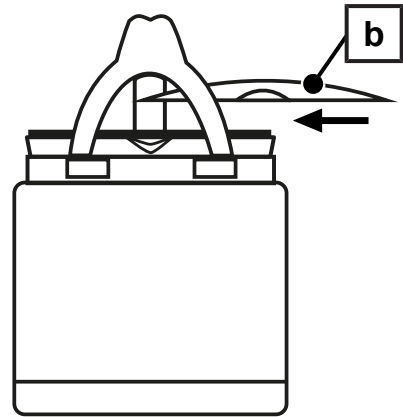


6. Align the metal collar in such a way that the other screw on the collar lie exactly opposite the spout (pos. a).

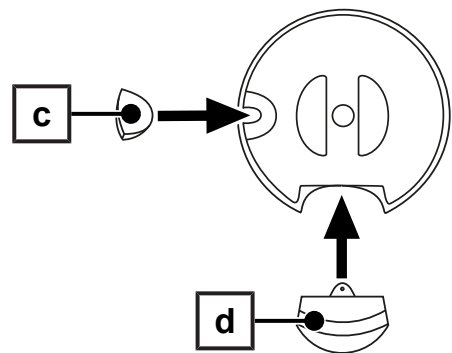


7. Refasten the metal clip with the screw. Do not overtighten the screws when tightening.
8. Fill the glass flask 3/4 full with warm tap water. Add 1-2 drops of washing-up liquid and clean the inside of the glass flask.
9. Afterwards, rinse and clean the glass flask thoroughly with clear water.

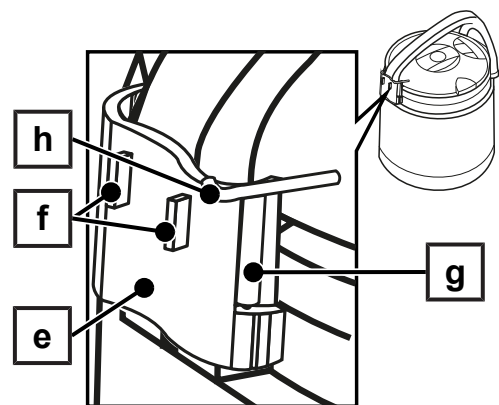
10. Place the cover (pos. b) on the glass flask in such a way that the spout remains open.



11. Place the adapter cover (pos. c) and the spout cover (pos. d) on the lid of the glass flask. If the covers are not needed, they can be placed on the corresponding mounts.



12. Place the holder for the adapter cover (pos. e) on the grip end. For safe storage during operation, the adapter cover can be placed on the latching lugs (pos. f) of the holder.



13. Place the holder for spout cover (pos. g) from above onto the holder for the adapter cover. The spout cover can be hooked onto the rear end (pos. h) for safe storage during operation. In addition, the holder fixes the cover of the glass flask to prevent it from falling down.

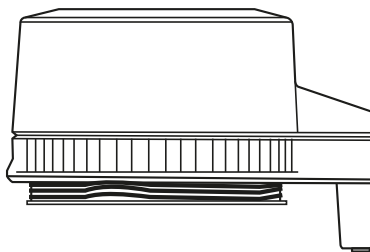
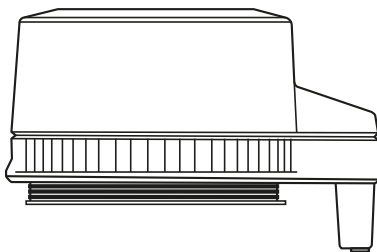
Before commissioning

Comply with the following for safe handling:

- Only the power cable included in the scope of delivery may be connected to the device.
- The power cable may only be replaced by an original spare part from MELAG.
- Disconnect the device from the mains during long downtimes.
- Only connect the device to a suitable power source.

Checking the cover seal in the upper section of the distilling chamber

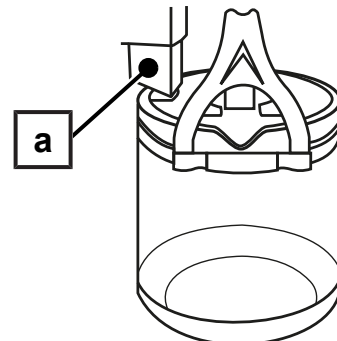
Before initial commissioning and every further use of the device, check the correct position of the cover seal in the upper section of the distilling chamber. The seal may not present any uneven surfaces and must lay entirely flat. Otherwise, boiling water could leave the upper section and e.g. flow onto the work surface. If the seal does not lie flat, press it on with your hand. Do not use sharp-edged objects.



Cleaning the distilling chamber

Although the distilling chamber of the MELAdest 65 has been cleaned with the greatest of care, manufacturing, packaging and dispatch procedures could result in the presence of harmless residues of various substances. As a result, the distilled water produced during initial commissioning could assume an undesired odour. To eliminate all odour-generating factors, proceed as follows:

1. Set up the water distiller.
2. Remove the connection cable from the distilling chamber.
3. Remove the upper section of the distilling chamber.
4. Fill approx. 0.5 l of tap water into the distilling chamber.
5. Put the upper section back on the distilling chamber.
6. Plug the connection cable into the socket on the distilling chamber.
7. Place the glass flask (laterally rotated) without the adapter cover under the distilling chamber discharge opening (pos. a).



8. Plug the plug into the socket.
9. Press the START/RESET button to activate the water distiller.
 - ➔ The ventilator motor begins to run.
 - ➔ The water distiller switches off automatically when no more steam comes out of the discharge opening.

10. Pull out the power plug.
11. Empty the glass flask.
12. Wipe out the inside of the glass flask with a non-fuzzing cloth.
 - ↳ The distilling chamber is now flushed and ready for commissioning.

5 Operation

Producing distilled water



WARNING

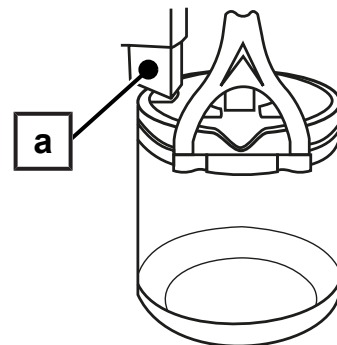
Danger of scalding from escaping steam

The water is very hot. Steam can be emitted from the upper section and cause scalding.

- Never remove the upper section if the radiator motor is running.
- Allow the water distiller to cool for 30 min before removing the upper section.

Proceed as follows to produce distilled water:

1. Pull out the power plug.
2. Remove the connection cable from the distilling chamber socket.
3. Remove the upper section of the distilling chamber.
4. Fill the distilling chamber up to the upper marking with approx. 4 l of tap water.
PLEASE NOTE: The use of hot water reduces the length of the action.
5. Put the upper section back on the distilling chamber.
6. Plug the connection cable back into the distilling chamber socket.
PLEASE NOTE: Check the seal in the upper section of the distilling chamber before each use. See [Before commissioning](#) [▶ Page 10].
7. Place the glass flask (laterally rotated) under the distilling chamber discharge opening (pos. a).



8. Plug the power plug into the socket.
9. Press the START/RESET button.
 - ↳ The ventilator motor in the upper section of the distilling chamber starts.
 - ↳ Once the cycle has finished, the water distiller will switch off automatically. The distilled water in the glass flask is ready to use.
10. Close the side opening of the glass flask with the adapter cover.
11. Disconnect the power plug from the socket.
12. Allow the device to cool down for approx. 30 min.
13. Dry the inside of the distilling chamber with a cloth to prevent corrosion.

TIP: To check the ▶conductivity of the water produced (aqua dest), MELAG recommends the MELAG conductivity meter.

6 Maintenance

Maintenance intervals

Interval	Measure
before each use	Checking the cover seal Check the position of the seal for uneven surfaces. If the seal is uneven, press on it with your hand. Do not use sharp-edged objects.
after each use	Internal cleaning of the distilling chamber
Every 6 months	Removing limescale deposits

Cleaning the distilling chamber



NOTICE

Danger of short circuit

If water comes into contact with the electric connections, this can result in the short-circuiting of the water distiller.

- Never immerse the distillation chamber in water.

Clean the inside of the distilling chamber with lukewarm tap water and a sponge to remove the deposits from the distilling chamber. With persistent soiling / deposits on the inside walls, use only a mild stainless steel cleaning medium, with a pH value between 5 and 8. Wipe out the inside of the glass flask with a non-fuzzing cloth.

Descaling the water distiller



WARNING

The vapours from the cleaning agent must not be inhaled. The citric acid must not get into the eyes or mouth.

- Upon contact with eyes, rinse carefully with water and consult a doctor immediately.
- Upon swallowing rinse mouth with generous quantities of water and drink 1-2 glasses of water. Consult a doctor immediately.
- Keep out of the reach of children.

Decalcify the inside of the distilling chamber when there are heavy limescale deposits or after 6 months at the latest. MELAG recommends using MELAG citric acid.

Descal the water distiller as follows:

1. Fill the water distiller up to slightly above the sediment with clean tap water.
2. Switch on the water distiller and wait until the water is warm. Once the water has warmed, switch off the water distiller by disconnecting the power plug.
3. Add four normal spoons citric acid into the water distiller.
4. Allow the solution to settle for approx. 15 min until the water no longer bubbles.
5. Dispose of the solution in the sink under flowing water and rinse the inside of the water distiller well with clear water.
6. Should any further residue remain in the water distiller, repeat the previous steps.
Please note: Loosen persistent deposits with a non-metallic kitchen sponge.

7 Malfunctions

Event	Possible causes	What you can do
No distilled water is produced	The plug is not in the socket	Check the plug
	Socket is defective	Check the electricity supply on the socket
	Upper section connection cable is not on the distilling chamber	Connect the connection cable to the distilling chamber
	START/RESET button is not depressed	Press the START/RESET button
Too little distilled water produced	Upper section connection cable is not on the distilling chamber	Connect the connection cable to the distilling chamber
	Distilling chamber is not filled sufficiently	Refill with tap water
	The cover seal does not seal sufficiently, steam or water escapes	Replace the cover seal in the upper section of the distilling chamber
	Glass flask positioned incorrectly under the water distiller	Check whether water flows past the glass flask and place the glass flask under the water distiller correctly
	Cooling system soiled	Clean the cooling system, blow out with compressed air if necessary
Steam escapes under the discharge opening of the upper section	Upper section connection cable is not on the distilling chamber	Connect the connection cable to the distilling chamber
The water distiller does not heat	The water distiller overheats	Allow the water distiller to cool for 5-10 min, then restart
The water distiller does not deactivate automatically	Overheating switch defective	Contact an authorised customer services / stockist technician.

8 Technical data

Device type	MELAdest 65
Height	38 cm
Diameter	23 cm
Dimensions glass flask (Ø x H)	18 x 18.3 cm
Empty weight	4.2 kg
Capacity	approx. 1 l/h
Conductivity of the distilled water	2-3 µS/cm
Electrical connection	
Power supply	230 V, 50/60 Hz
Max. electrical power	800 W

9 Accessories and spare parts

You can obtain the specified articles and an overview of further accessories from your stockist.

Article	Art. no.
Water storage container of MELAdest 65	ME01067
Citric acid E330 (2x 0.35 kg)	ME73000
Conductivity meter (to check the water quality)	ME01060

Glossary

Conductivity

is the ability of a conductive chemical substance or mixture of substances to conduct or transfer energy or other substances or particles in space.

Distilled water

From the Latin aqua destillata; also referred to as aqua dest; water which to a great extent is free from salts, organic material and micro-organisms, is produced from normal tap water or pre-cleaned water through the process of distillation (evaporation and subsequent condensation). Distilled water is used, for example, as feed water for steam sterilizers.



MELAG Medizintechnik GmbH & Co. KG

Geneststraße 6-10
10829 Berlin
Germany

Email: info@melag.com
Web: www.melag.com

Original instructions

Responsible for content: MELAG Medizintechnik GmbH & Co. KG
We reserve the right to technical alterations

Your stockist