

User's instruction

IMPORTANT SAFETY INSTRUCTIONS

- The thermometer is suitable exclusively for measurement of the body temperature!
- The minimum measurement time until the signalling tone (beep) must be maintained without exception!
- The thermometer contains small parts (battery, etc.) that can be swallowed by children. Therefore never leave the thermometer unattended to children.
- Protect the thermometer from hitting and striking!
- Avoid ambient temperatures above 55°C. NEVER boil the thermometer!
- Use only the commercial disinfectants listed in the section <<cleaning and disinfecting>> to clean the thermometer.
- **Warning:** The thermometer contains a long-life battery. For disposal, please comply with local regulations for special waste.
- The manufacturer recommends to verify the accuracy by an authorised laboratory every 2 years.

TURNING ON THE THERMOMETER

To turn the thermometer, push the button over the display window; a short signalling tone (beep) signals <<thermometer ON>>. A display test <<ok>> is performed. Then at an ambient temperature of less than 28°C, an <<Lo>> and a flashing <<C>> appear at the upper right of the display. The thermometer is now ready for use.

FUNCTION TEST

Proper functioning of the thermometer is tested automatically each time it is turned on. If a malfunction is detected (measurement inaccuracy), this is indicated by <<Err>> on the display, and a measurement becomes impossible. In this case, the thermometer must be replaced.

USING THE THERMOMETER

During a measurement, the current temperature is displayed continuously. The <<°C>> symbol flashes during this period of time. If the signalling tone sounds and the <<°C>> is no longer flashing, this means that the thermometer is ready for reading. To prolong the life of the battery, turn it off after use by pressing the operating button briefly. Otherwise the thermometer will automatically turn off after about 8 minutes.

STORAGE OF MEASURED VALUES

If you hold the button down for more than 3 seconds when turning the thermometer on, the maximum temperature stored automatically at the last measurement will be displayed. At the same time, a small <<M>> for memory will appear at the right of the display. After 3 more seconds, this value will disappear and the thermometer will switch to the normal measurement mode.

CLEANING AND DISINFECTING

The thermometer is 100% waterproof. Please use one of the following disinfectants for disinfecting, following the manufacturer's instructions in each case.

Disinfectant	Dilution with water	Method
Ethanol	70-80 %	wipe the probe with a cloth moistened with the disinfectant
Isopropyl Alcohol	70-90 %	wipe the probe with a cloth moistened with the disinfectant
Glutaraldehyde	0,5-2 %	immerse the probe for 30 minutes
Alkylpolyaminoethylglycine	0,05-0,2 %	immerse the probe for 30 minutes
Benzylkonium Chloride	0,1 %	immerse the probe for 30 minutes
Benzathonium Chloride	0,1 %	immerse the probe for 30 minutes
Gluconate Chlorohexidine	0,1-0,5 %	immerse the probe for 30 minutes
Sodium Hypochlorite	0,02-0,05 %	immerse the probe for 30 minutes

Note: Any other cleaning solution, dilution or cleaning method can cause a malfunction of the thermometer! **The thermometer must never be boiled!**

MEASURING METHODS

In the mouth (oral)

Position the thermometer in one of the two pockets under the tongue, to the left or right of the root of the tongue. The measuring sensor must be in good contact with the tissue. Close your mouth and breath evenly through the nose to prevent the measurement from being influenced by inhaled/exhaled air.

Approx. measuring time: 1 minute

In the anus (rectal)

This is the most reliable measuring method, and is especially appropriate for infants and small children. Carefully insert the tip of the thermometer 2 to 3 cm into the anal aperture.


Approx. measuring time: 1 minute

In the armpit (axillary)

From a medical viewpoint, this method will always provide inaccurate readings, and should not be used if precise measurements are required.

Approx. measuring time: 3 minutes

BATTERY REPLACEMENT

When the  symbol appears in the lower right of the display, the battery is exhausted and needs replacing. For the battery replacement:

- Please remove the compartment lid of the thermometer.
- Insert a new 1.5 V button battery with the cathode side (-) up.
- Make sure a battery of the same type is on hand.
- Batteries can be purchased at any electrical goods shops.
- For battery disposal please refer to <<safety instructions>>.

TECHNICAL SPECIFICATIONS

Type	Maximum thermometer
Measurement range	28,0 °C to 42,9 °C Temp. < 28,0 °C: display <<Lo>> for low (too low) Temp. > 42,9 °C: display <<Hi>> for high (too high)
Measurement accuracy	+/- 0,1 °C between 35,5 °C and 42,9 °C; +/- 0,2 °C lower than 35,5 °C at the ambient temperature of 18 °C a 28 °C
Self-test	Automatic internal check at a test value of 37,0 °C if there is a deviation of > 0,1 °C. <<Err>> (error) is displayed.
Display	Liquid crystal display (LCD) with 3 digits Smallest unit of display 0,1 °C
Signalling tone	For signalling that the thermometer is ready to use and that the temperature increase is less than 0,1°C/ 8 seconds
Memory	For storing the last measured value.
Storage temperature	-20 °C to + 55 °C
Battery	1,55 V Type LR 41, AG3 or similar

Reference to standards:

- Medical Product Act as Aug. 02. 1994
- EN ISO 13485
- Directive 93/42/EEC of the council as of June 14, 1993 for medical products
- EN 12470-3:2000, Clinical Thermometers – Part 3 : Performance of compact electrical thermometers with maximum device
- ASTM-Standard

The Thuringia State Office for weights and measures confirms and certifies that a quality assurance system was implemented to check and inspect the devices in accordance with Annex VI, Section 3 of the Directive 93/42/EEC. The device is entitled to bear the CE 0118 label.

WARRANTY

We grant you a 2 years warranty after the date of purchase. This product has been produced with the greatest care according to international quality standards, established in the European Guideline for Medical Products 93/42/EEC, and it was subjected to strict testing before delivery. Should you nevertheless have reasons for complaint, please send the thermometer together with the warranty certificate, filled out, to the service address given on the back. Any damage caused by improper handling shall not be covered by the warranty. Batteries and packaging are also excluded from the warranty. All other damage claims excluded. A warranty claim must be submitted within the warranty period. Please package your defective thermometer well and send with sufficient postage to:

Manufacturer: Geratherm Medical AG
Fahrenheitstraße 1
D-98716 Geschwenda
Germany

