



INSTRUCTIONS FOR USE

Cleaning and disinfection

Tonometer measuring prisms and
contact lenses

7. Edition / 2021 – 04

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Purpose of use

This document describes the correct cleaning and disinfection procedures for the tonometer measuring prisms and contact lenses from Haag-Streit. Correct cleaning and disinfection not only prevents the transmission of diseases to patients and users, but also mechanical damage. To protect both the materials and patients alike, this procedure has been validated by an accredited testing laboratory. The validation report is available from Haag-Streit on request.

**WARNING!**

Read the instruction manual carefully before commissioning this product. It contains important information regarding the safety of the user and patient.



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1 Safety



DANGER!

Failure to comply with these instructions may result in material damage or pose a danger to patients or users.



WARNING!

These warnings must absolutely be complied with to guarantee safe operation of the product and to avoid any danger to users and to patients.



NOTE!

Important information: please read carefully.

1.1 Ambient conditions

Please observe the instruction manuals for the respective products.

1.2 Important general notes



WARNING!

- The products listed in this instruction manual are not sterilized when delivered. They must be cleaned and disinfected prior to every use.
- The measuring prisms and contact lenses used must not be damaged as they might otherwise damage the patient's cornea.
- Examinations must only be performed with undamaged, cleaned and disinfected measuring prisms and contact lenses.
- Residue from cleaning agents and disinfectants can irritate and burn the patient's eye.
- Improper preparation can result in the transmission of diseases to the patient and user as well as damage to the measuring prisms and contact lenses.



NOTE!

- All the warnings and notes in the instruction manuals of the measuring prisms and contact lenses must be followed without exception.
- As a rule, the measuring prisms and contact lenses may be prepared together but should not be prepared with any other products.

1.3 Operation, environment



WARNING!

The operation and preparation must only be performed by qualified, trained personnel, whose training corresponds to the task of the operator.



NOTE!

- Appropriate professional assessment and caution are necessary.
- The safety instructions in the instruction manuals for the measuring prisms and contact lenses also apply.

1.4 Warranty and product liability

- The products must be treated as described in the 'Safety' chapter in their instructions for use.
- Improper handling can damage the product. This would void all guarantee claims.
- Continued use of a product damaged by incorrect handling may lead to personal injury. In such a case, the manufacturer will not accept any liability.

1.5 Validated disinfection agents

The following disinfection agents were used in several validations. The validation reports are available from Haag-Streit on request.

Disinfection agents:

Product	Concentration	Residence time	Rinse / Immerse
Hydrogen Peroxide H ₂ O ₂	3%	10 minutes	Rinse with cold drinking water for 30 seconds / Immerse for 60 seconds
Sodium Hypochloride NaOCl ¹⁾	2.5%	10 minutes	
Cidex [®] OPA ¹⁾	0.55%	12 minutes	
Rapicide [®] OPA/28 ¹⁾	100%	10 minutes	

1) Do not use for contact lenses 1210

**IMPORTANT NOTE FOR THE USA ONLY!**

Use only Cidex[®] OPA oder Rapicide[®] OPA/28 as disinfection agent.

2 General description for cleaning and disinfecting baths and containers

**NOTE!**

- All components of the standard medical disinfection baths must be cleaned and disinfected prior to every use. Follow the instructions of the standard medical disinfection baths if available.
- To store the measuring prisms and/or contact lenses prior and after the disinfection process we recommend the use of special containers with inserts (see chapter 4).

2.1 Cleaning

- Remove the protective films if applicable.
- Thoroughly clean all components with a commercially-available detergent.
- Rinse with plentiful drinking water (guide time 60 seconds).

2.2 Disinfecting

- For disinfection the components we recommend a disinfectant that is approved for instrument disinfection. The use of a different disinfectant is the responsibility of the user.
- All components are immersed in this agent.
- Once the exposure time has expired, rinse all components with drinking water in accordance with manufacturer's specifications (guide time 60 seconds).
- Dry the components with a sterile and soft disposable cloth.

3 Cleaning and disinfection procedure for measuring prisms and contact lenses

**WARNING!**

The disinfectant used must satisfy two criteria:

- For **material compatibility** reasons, only agents approved by Haag-Streit may be used. The material compatibility with various tested disinfectants can be found in the "List of Disinfectants" at www.haag-streit.com and is included with the tonometer and measuring prism. Should the operator decide to employ other disinfectants or procedures of his own accord, it must be ensured that the disinfection is not performed with agents containing alcohol or acetone and is never performed with UV radiation, steam or ethylene oxide.
- In terms of **efficacy**, all disinfectants that are approved for instrument disinfection and that have been tested for their efficacy against all nosocomially relevant infectious agents, can generally be used as long as they also satisfy the material compatibility requirements outlined above. The user is responsible for selecting the correct disinfectant and employing the correct concentration.

**NOTE!**

- For simple and safe disinfection, we recommend the use of two standard medical disinfection baths (one for disinfection, one for rinsing after disinfection).

- The following cleaning and disinfection instructions refer to use of two standard medical disinfection baths.
- Used instruments must be rinsed after use before any residue dries on.
- When handling with disinfection agent wear protective gloves/ protective clothing/eye protection/face protection.

3.1 Cleaning

1. Remove the measuring prisms from the holder.
2. Clean the measuring prisms and/or contact lenses under cold drinking water until no more soiling is visible.
3. Dry measuring prisms and/or contact lenses with a new, lint-free disposable cloth.
4. Perform visual checks for cleanliness and perfect working condition.
5. Place the cleaned measuring prisms and/or contact lenses in a clean plastic container.

3.2 Disinfecting

6. Clean and disinfect the baths, the bath inserts and the weights for immersing (see chapter 2).
7. Place all measuring prisms and/or contact lenses to be disinfected in the bath insert.
8. Take the first bath and add at least as much disinfecting solution as necessary to fully immerse the measuring prisms and/or contact lenses.



NOTE!

- We recommend the use of a disinfection agent used in one of our validations (see chapter 1.5).
- The operator accepts all liability for the use of other disinfection agents.
- The maximum, material-compatible exposure time for the disinfectant is 60 minutes.

9. Immerse the bath insert with the measuring prisms and/or contact lenses in the disinfectant solution and place the weight for immersing so that all measuring prisms and/or contact lenses are fully immersed.



WARNING!

- All measuring prisms and/or contact lenses must be completely immersed in the disinfectant solution.
- As the measuring prisms tend to float in the solution, they must always be weighted with the weight for disinfection bath.

10. Allow the disinfectant sufficient time to work as specified in the disinfectant manufacturer's instructions. If you use one of the validated disinfectant agents take the exposure time from the table in chapter 1.5.
11. Once the exposure time has expired, remove the bath insert with the measuring prisms and/or contact lenses.



NOTE!

The disinfectant must be replaced as follows:

- When visibly soiled.
- Once a day or as specified by the manufacturer.

12. Rinse the measuring prisms and/or contact lenses in the bath insert under running, cold drinking water thoroughly for at least 30 seconds.
13. Immerse the bath insert with the measuring prisms and/or contact lenses in a second bath filled with cold drinking or distilled water. Place the second weight for immersing so that all measuring prisms and/or contact lenses are fully immersed. Set for 60 seconds.
14. Remove the bath insert with the measuring prisms and/or contact lenses.
15. Store the cleaned and disinfected measuring prisms and/or contact lenses in a clean and disinfected container until their next use.

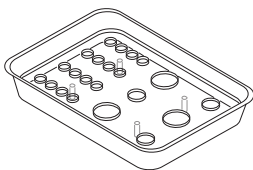


WARNING!

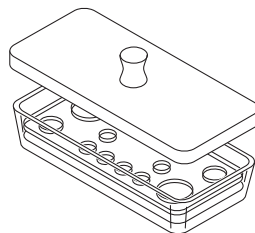
Only use clean, residue-free and undamaged measuring prisms and contact lenses! Prior to every use, the contact surface of the measuring prisms or contact lenses must be inspected for contaminants or damage (scratches, cracks or sharp edges). This must be performed with a slit lamp microscope at 10x to 16x magnification!

4 Special containers with inserts

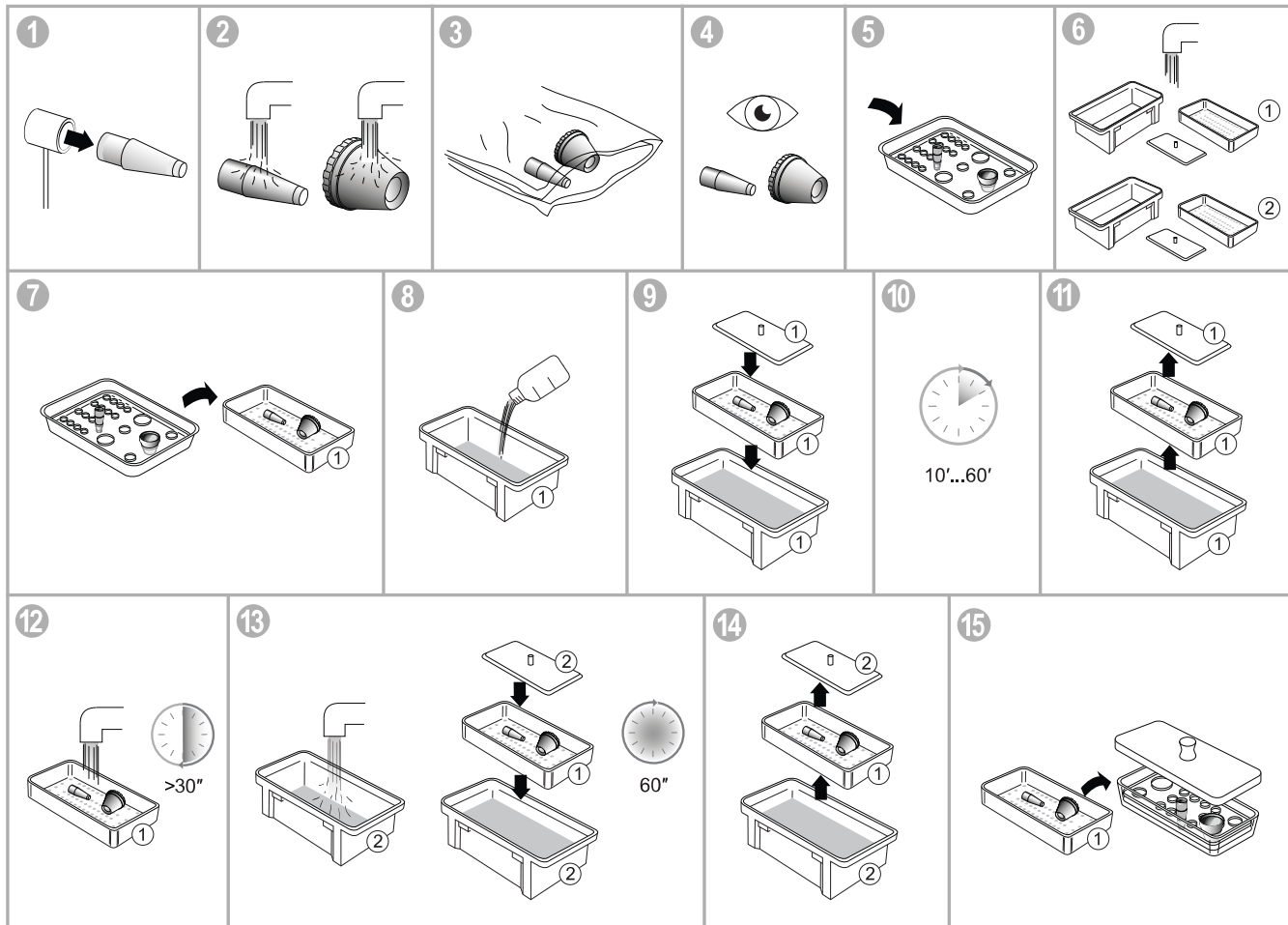
Components	REF
Plastic container to store measuring prisms and/or contact lenses prior to the disinfection process	1001726
• Suitable plastic insert for measuring prisms	3300595
• Suitable plastic insert for contact lenses	3300594
• Suitable combined plastic insert for measuring prisms and contact lenses	3300593
Sealable glass container to store measuring prisms and/or contact lenses after the disinfection process	1001724
• Suitable plastic insert for measuring prisms	3300050
• Suitable plastic insert for contact lenses	3300049
• Suitable combined plastic insert for measuring prisms and contact lenses	3300048



Example: Plastic container (1001726) with combined plastic insert (3300593)



Example: Sealable glass container (1001724) with combined plastic insert (3300048)



Should you have any further questions, please contact your Haag-Streit representative at:

<http://www.haag-streit.com/contact/contact-your-distributor.html>



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