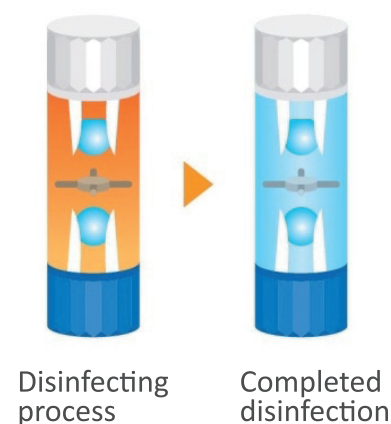


Ease of use

[No-rub, one-step care system!]

Simple care by just inserting a neutralizing tablet and the disinfecting solution into the lens case.

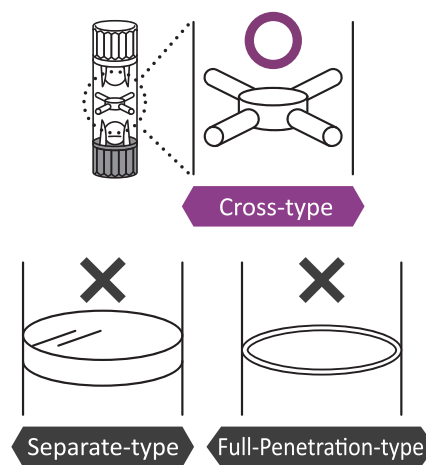
Through the visual indication of a complete disinfection, anyone can carry out the correct lens care with ease.



Disinfecting process

Completed disinfection

Recommended Lens Case.



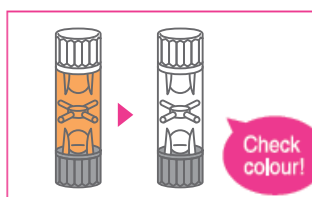
cleadew GP

Effective Care Solution For Healthier Eyes

How to use

Wash your hands well with mild soap before handling your contact lenses.

1 DISINFECTING, CLEANING AND NEUTRALIZING



- Place the lenses into the case's lens holders.
- Close the case lid on one side, put a neutralizing tablet in, and fill up to 90% of the case with the orange disinfecting and cleaning solution.
- Close the lid on the other side tightly.
- Soak the lenses for over four hours (or overnight).
- Confirm that the lenses and the solution are clear before wearing them.

2 RINSING LENS

- Open the lid on one side and discard the solution in the lens case.
- Fill the case with saline solution up to 60% of the case's capacity and close the lid tightly.
- Shake the case to rinse the lenses well.
- Discard the saline solution in the case and rinse the lenses again in the same way.

3 WEARING LENS

Remove the lenses from the holders and wear them.

4 WASHING LENS CASE

After the care of the lenses is completed, wash the lens case with saline solution and allow it to air dry.

Product guide



Features

1. Use of povidone-iodine as a disinfectant with high efficacy

Povidone-iodine is widely known to be a highly effective disinfectant against microorganisms that adhere to contact lenses.

2. Deep removal of protein and lipid deposits on contact lens

A proteolytic enzyme is included in the solution to break down and remove the deposits effectively without the need of a separate cleaner. A surfactant is also present to remove lipid deposits.

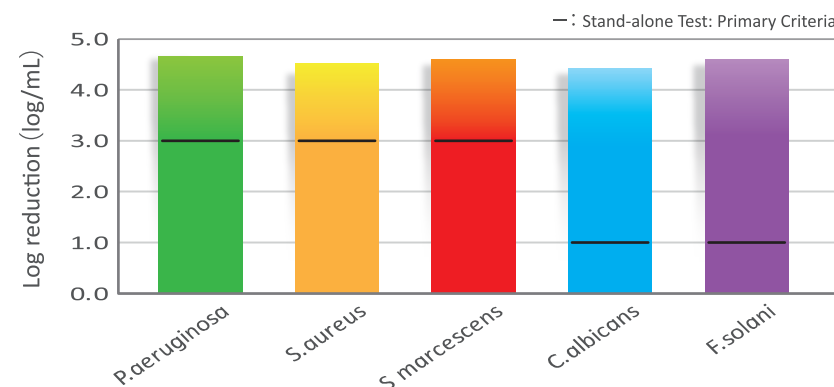
3. Ensure safety to the eyes

Not only is it highly effective against microorganisms, but also has a low concentration level to ensure safety to the eyes.

Disinfecting efficacy

cleadew GP has a high disinfecting efficacy against a wide range of microorganisms including bacteria, viruses, and even the highly resistant acanthamoeba.

Efficacy against standard strains



Test method:
According to stand-alone test (ISO14729), $1.0 \times 10^5 \sim 10^6$ cfu/mL of the test strains are placed into cleadew GP and left aside for the required care time. The remaining live strains are counted afterwards.

(Ophtecs data)

Efficacy against acanthamoeba



After introducing the solution

After replacing with culture medium

Povidone-iodine solution instantly destroys and inhibits the growth of acanthamoeba cells.

Test method:
Acanthamoeba (trophozoite) is inoculated in disinfecting solution and neutralizing tablet of cleadew GP. After 4 hours, the solution containing acanthamoeba is introduced into E.coli-MY culture medium. After 17 hours, the condition of acanthamoeba is examined.

(Ophtecs data)

Cleaning efficacy

The proteolytic enzyme in cleadew GP effectively breaks down and removes the adherent protein deposits. A surfactant is also present to remove lipid deposits.

Efficacy against denatured protein deposits

Efficacy of proteolytic enzyme



Test method:
Adhere denatured lysozyme deposits onto the lens and carry out care with cleadew GP. Dye the leftover deposits in red before confirming the leftover counts.

(Ophtecs data)

Efficacy against lipid deposits

Efficacy of surfactant

Anionic surfactant in cleadew GP effectively

removes **95%** of the lipid deposits.

Test method:
Adhere compounding lipid deposits onto the lens and carry out care with cleadew GP. The removal efficacy is measured and determined by the amount of leftover lipid deposits.

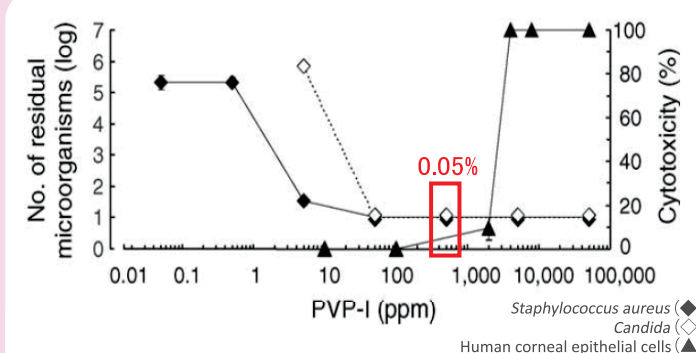
(Ophtecs data)

Safety

cleadew GP is highly effective against infection-causing microorganisms, and it ensures safety to the corneal epithelium.

Disinfecting efficacy and safety level

Povidone-iodine has a high disinfecting efficacy against bacteria and viruses, while still maintaining a safety level of the corneal impact.



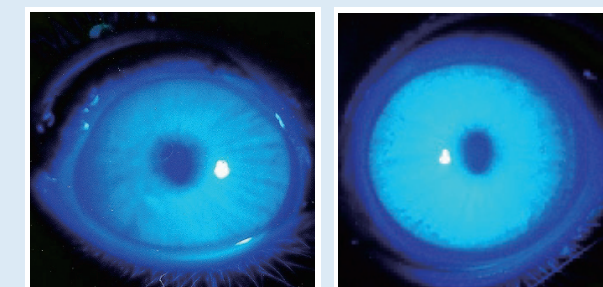
Povidone-iodine shows sufficient disinfecting efficacy between 50~500 ppm (left axis). However, a low cytotoxicity level is confirmed up to 2000 ppm (right axis).

cleadew GP contains 0.05% povidone-iodine. It maintains a high disinfecting efficacy and a low level of cytotoxicity.

R. Yanai et al. / Contact Lens & Anterior Eye 29 (2006) 85-91

Impact on corneal epithelial barrier

Impact after addition of 0.05% povidone-iodine



Untreated eyes

After addition of 0.05% povidone-iodine

Test method:
Add 0.05% of povidone-iodine into the eyes of the laboratory rabbit. After 5 minutes, apply fluorescent dye into the eyes and examine it with blue rays under a slit lamp.

(Ophtecs data)