

FOR ALL
RIGID GAS PERMEABLE
CONTACT LENSES

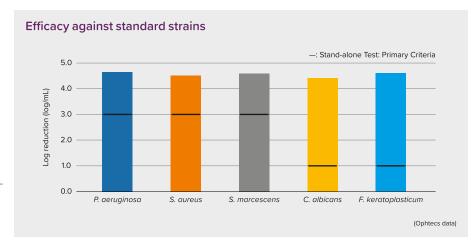




## Use of povidone-iodine as a disinfectant with high efficacy

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

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



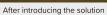
#### Test method:

rest metnos: According to stand-alone test (ISO14729), 1.0×10⁵~10° 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.

#### Efficacy against acanthamoeba

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







After replacing with culture medium

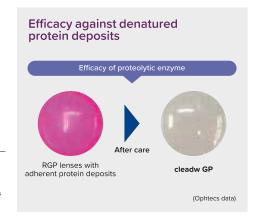
Test method:
Acanthamoeba (trophozoite) is inoculated in disinfecting solution and neutralizing and cleaning tablet of cleadew GP. After 4 hours, the solution containing acanthamoeba is introduced into E.coli-MY culture medium. After 17 hours, the condition of acanthamoeba is examined.



## Deep removal of protein and lipid deposits on contact lens

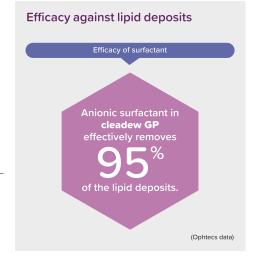
The proteolytic enzyme in **cleadew GP** effectively breaks down and removes the adherent protein deposits.

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.



# 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.



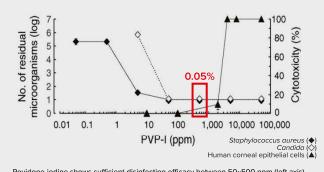
# Ensure safety to the eyes

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

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

### 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  $50{\sim}500$  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







(Ophtecs data)

**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.

## 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

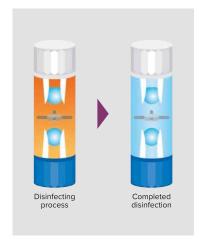


# No-rub, one-step care system!



Simple care by just inserting a neutralizing and cleaning 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.







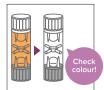


- 1 Disinfecting solution: 120mL × 1 Povidone-iodine (0.05%),
  - ⊕ Boric acid
- Rinsing solution (cleadew CareSolution): 120mL × 1
  Hydrogen peroxide as preservative (0.004%),

  Boric acid
- Neutralizing and cleaning tablet: 30 tablets Sodium sulfite (2.4mg/tablet), Proteolytic enzyme (8.0mg/tablet)
- 4 Lens case: 1
- Wash your hands well with mild soap before handling your contact lenses.
- Be sure to use the dedicated case.









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



- Open the lid on one side and discard the solution in the lens case.
- Pick up the cleaned/disinfected lenses from the holder. Hold them with your fingers and rinse both sides with cleadew CareSolution for at least 10 seconds.

### CAUTION

Avoid using saline or MPS solutions containing sodium chlorite as a preservative or disinfectant.



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