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.

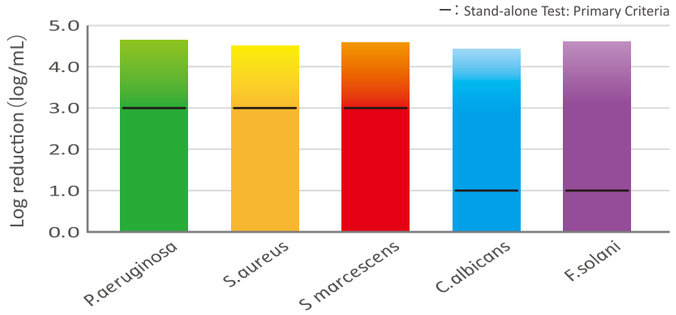
3. Ensure safety to the eyes

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

Disinfecting efficacy

O2Sept 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）, 1.0×10^5〜10^6 cfu/mL of the test strains are placed into O2Sept 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

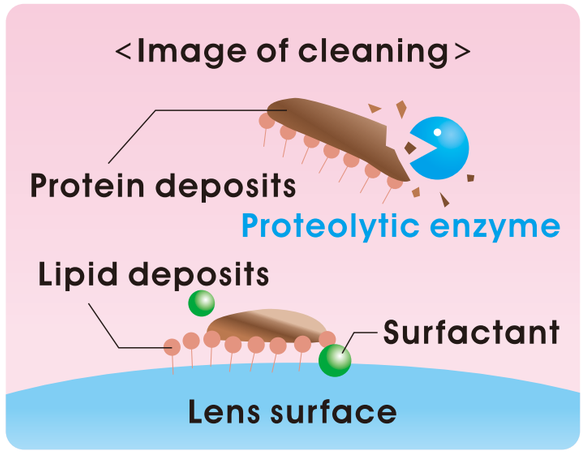
Povidone-iodine solution instantly destroys and inhibits the growth of acanthamoeba cells.

Test method:
Acanthamoeba (trophozoite) is inoculated in disinfecting solution and neutralizing and cleaning tablet of O2Sept. 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 Anionic surfactant in O2sept effectively breaks down the lipid deposits. Proteolytic enzyme is also present to remove the protein deposits.



No-rub, one-step

Lens cleaning without rubbing
Use the specified lens case to quantify 4ml

Soak in O2Sept + neutralizer tablet for over four hours

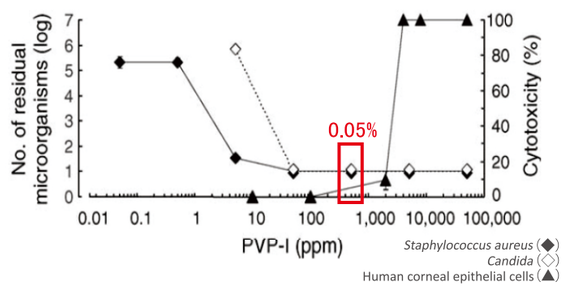
Can disinfect, cleanse and break down the tear film components and protein that are deposited on the lens

Safety

O2Sept 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.



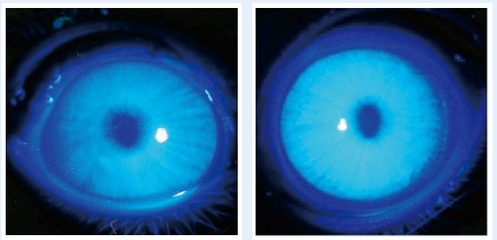
Povidone-iodine shows sufficient disinfecting efficacy between 50〜500 ppm（left axis）. However, a low cytotoxicity level is confirmed up to 2000 ppm (right axis).

O2Sept 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)