EPIC Online Technology Meeting on UV Disinfection

Ushio Care222® Filtered Far UVC Disinfection

Protect your business with 222 nm excimer by Ushio. Prepare for the future with human-friendly UV disinfection.

Ushio Germany GmbH Dr. Jörg Söllner



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USHO Applying Light to Life



Well-known: UVC light can efficiently inactivate microbes such as bacteria, virus, etc.

Mechanism

DNA and RNA of microbes absorb UVC light

- \rightarrow break of bonding
- \rightarrow inactivation of microbes



Mitchell, D.L., Nairn, R.S. (1989). The biology of the (6-4) photoproduct. Photochem. Photobiol., 49(6), 805-19.

Conventional Germicidal lamp

Low pressure (mercury) lamp at 254 nm UVC:

effective, **but can not be used in presence of people**

 \rightarrow causes skin cancer and cataracts

(max. dose 6 mJ/cm² per day according to current EU directive 2006/25/EC)







The possibilities of Light: KrCl excimer lamp with 222 nm UVC



USHIO

Applying Light to Life: Ushio Care222® technology



Ushio Care222® technology kills bacteria and inactivates viruses without damaging human cells/tissues using narrow-band spectrum UV (world wide exclusive license from Columbia University)



→ Ushio Care222® technology successfully removes harmful band

Care222® technology benefits for humans



General UV Light Precaution: Do not look directly into the light source. Switch off the light source or wear eye protection if you are in close proximity.

USHIO



Component Set for OEMs





B1 / B2

Complete Solution Unit



Virus control and Disinfection device Installed mainly at medical facilities in Japan, more than 2000 units since early 2021



Care222® filters out dangerous UV-C rays: Beware of imitations and manipulated data!

Thank you for your attention! Dr. Jörg Söllner joerg.soellner@ushio.de

Care222® Product Enquiry Questionnaire

Do not miss the presentation of our partner UV Medico represented by Mr. Nicolas Volet!



