

# Diaclean Pera Sterilant, a high-level disinfectant product, by UMP

By T.N.Alagesh - September 7, 2020



A team of researchers from Universiti Malaysia Pahang (UMP) have produced their very own environment-friendly disinfectant made from vinegar (food-grade acetic acid). -Photo courtesy of UMP

KUANTAN: A team of researchers from Universiti Malaysia Pahang (UMP) have produced their very own environment-friendly disinfectant made from vinegar (food-grade acetic acid) to help battle the Covid-19 pandemic.

The high-level disinfectant, Diaclean Pera Sterilant innovation, which contains active ingredient peracetic acid from food vinegar can kill 99.9 per cent of micro-organisms such as bacteria, viruses, fungi and protozoa in 30 seconds.

Professor Datuk Dr. Zularisam Ab Wahid, who led the team of researchers from the Civil Engineering Technology faculty, said the disinfectant has been tested for its effectiveness by Viroxy Lab, the only accredited laboratory for virucidal examination in Malaysia.

"Diaclean Pera Sterilant can kill the common human coronavirus strain in just 30 seconds. It is non-irritant, has no odour and is cost competitive.

"The product has been tested for its effectiveness as an anti-bacterial substance through a vitro test at Makmal Bioserasi Klinikal Healthmedic Research Sdn. Bhd. and a vivo bio compatibility test at Makmal Bioserasi, Centre for Research and Instrumentation Management (CRIM), Universiti Kebangsaan Malaysia in Bangi," he said.

Zularisam said the innovative product is not only organic but also user friendly, non-toxic, non-corrosive, non-flammable and does not leave any adverse effects on the surface of contaminated materials.

"Pera Sterilant is environmental friendly and will decompose in the form of oxygen gas, food vinegar and water after eight hours of use. Peracetic acid is one of the disinfectants that has been listed as effective on the Covid-19 virus by the US Environmental Protection Agency.

"This innovative product that meets the ISO 13485 standard (International Quality Management System for Medical Devices) is alcohol and aldehyde-free," he said.

Zularisam said the product has been registered with the Medical Device Authority (MDA), Health Ministry as a medical device disinfectant and obtained Halal Certification from the Department of Islamic Development Malaysia (JAKIM).

He said the disinfectant is not only suitable for aerial fogging and public disinfection at homes, schools, offices and hospitals but can be used in the livestock industry,

food processing, packaging industry, medical device sterilisation, drinking water, dairy and sewage treatment.

The research and production of food vinegar-based disinfectant started in 2008 before being commercialised in 2015 under UMP Renal Care Sdn. Bhd, and has been used by more than 50 dialysis centres in Malaysia to sterilise synthetic kidney filters and hemodialysis machines.