General

Be wiser in choosing disinfectant product

Mon, 04/06/2020 - 12:10

Due to the outbreaks of COVID-19 in many countries around the globe, including Malaysia, items like disinfectant liquid, face mask, face shield and personal protective equipment are becoming more difficult to find in the market.

In fact, many has tried to produce it themselves, including disinfectant liquid, as an alternative to handle the outbreak of this epidemic.

UMP researcher, Professor Datin Dr. Mimi Sakinah Abdul Munaim from Faculty of Chemical and Process Engineering Technology, advices the public not to produce own hand sanitizer without consulting the experts.

“Extra precaution is needed when using chemicals such as alcohol isopropyl since it is flammable and can caused fire if it is not handle properly.

“Microbial inhibition test need to be conducted to ensure safe level of usage without unwanted side effects.

“But most importantly, the product must be able to kill the germs,” she elaborates further.

She also shares her 12 years experiences in producing hand sanitizer called Germs Free Hand Sanitizer. This liquid based hand sanitizer is added with betel leaves extract to prevent visible growth of bacteria.

“This product also contains Vitamin E and Aloe Vera suitable for the skin.

“What makes this product unique from other existing product in the market is that it can prevents the skin from became irritated due to the usage of ethanol, a petroleum-based chemical compound.

At the moment, this hand sanitizer comes in a form of gel and liquid”, she explains.

She also added, this innovation has been tested at Biocompatibility Laboratory in Universiti Kebangsaan Malaysia (UKM) to ensure the safe level of usage. Currently, this product has been widely used by UMP, companies, pharmacies and hospital in Kuantan.

“So far, we did not received any negative feedback from the customers. Many of them give positive feedbacks, such as it moisture and does not irritate the skin after using it, not like other product that can be found in the market,” she added.

Further research were also conducted by our team to diversify natural scents such as lemons.

“There is also demands that it not be mixed with other aromas especially for the use of hajj pilgrims

or those performing umrah.

“This product has been tested against bacteria and viruses (inhibit germs) with a new formula of optimal alcohol content up to 75 percent, but it does not irritate the skin and is safe to use.

"Manufacturing of this product were done in the UMP laboratory accredited with MS ISO 13485:2016 Certification and meets international quality standards," she said.

This product is also in the process of obtaining a halal certificate for disinfectant fluid and will need to go through various processes including the certification of best practice management from the National Pharmaceutical Regulatory Agency (NPRA).

With the Movement Control Order (MCO) enforced by the government, the team facing many challenges to meet the demand for this product that has increased ten time higher than before.

Among the challenges are the lack of raw material and increase in alcohol price by 50 percent that makes it difficult to obtain.

The same goes to the prices of the bottles, including the pumps that has risen by up to 150 percent, due to the closure of the factory operation following the outbreak of COVID-19.

Operates under UMP Renal Care Sdn. Bhd., a company under UMP Holdings Sdn. Bhd. they are capable of producing about 1,000 bottles per day or 300 liters in various sizes of 30 ml, 50 ml, 100 ml, 500 ml and 2 liters.

The company is currently produces high-level disinfectant products based on food vinegar for the future market.

Translation by: Nadira Hana Ab Hamid, Faculty Of Manufacturing And Mechatronic Engineering Technology

TAGS / KEYWORDS

MCO

COVID19

- 249 views

View PDF