

All HDB lift buttons treated with coating agent said to help fend off likes of Covid-19 for up to 3 months

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The disinfecting coating agent called "Sdst" being applied to lift buttons at public housing blocks.

SINGAPORE — An antimicrobial coating product that its makers say helps to protect against microbial surface contaminants such as the coronavirus that causes Covid-19, has been applied to 1.5 million lift buttons at 26,000 lifts at Housing and Development Board (HDB) estates. This was done in the last two weeks and the protective coating is said to last up to 90 days.

The product called "Sdst", manufactured in the United States by SD Labs, was donated by Changi Foundation, the charity arm of Changi Airport Group (CAG). CAG said in a media statement on Thursday (April 2) that the product has already been applied to frequently touched surfaces at Changi Airport. Besides donating 650 litres of Sdst to all town councils in Singapore, CAG also arranged for cleaning supervisors from each council to be trained on how to apply the coating correctly. CAG said: "Eco-friendly and safe, the coating safeguards against viruses, bacteria and fungi. It stays effective for three months without the need for reapplication during this period." It added that the product had been used as part of a broad effort to enhance precautionary measures against the spread of Covid-19.



To ensure proper application of the self-disinfecting coating, Changi Airport Group conducted training for all conservancy staff members. Photo: Changi Foundation

Mr Jayson Goh, CAG's managing director of airport operations management, said: "Through this initiative together with the town councils, we want to share the benefits of the coating with the wider Singapore community." He added: "This additional layer of protection will complement existing stepped-up cleaning efforts by the town councils and help raise the hygiene level at common areas like the lifts of public housing." The coating solution, distributed by SUTL EnvironTech, has been used at areas with high-touch points in Changi Airport since February this year. CAG said: "Sdst is a broad-spectrum coating comprising a modified quaternary ammonium compound. Approved by the United States Environmental Protection Agency, its self-disinfecting function mimics antimicrobial compounds which kill germs upon contact."

Upon contact with germs, Sdst causes physical rupturing of their outer cell membrane and prevents them from being infectious, providing an added layer of protection on top of increased cleaning and disinfecting. It can also remain effective for three months without reapplication, even with repeated scrubbing, CAG claimed. Dr Teo Ho Pin, co-ordinating chairman of town councils under the ruling People's Action Party, said that the use of this self-disinfecting coating on lift buttons will further reduce bacteria and virus transmission. "As hard objects may scrape the coating off, we seek users' cooperation not to press the buttons with pointed objects such as keys," he advised. The CAG media statement provides a link to a fact sheet about Sdst, written by Dr Yeo Wee Ming, a Singaporean microbiologist and the managing director of SUTL EnvironTech, which is part of the wider SUTL group located along Pasir Panjang Road.



Dr Yeo Wee Ming, a Singaporean microbiologist, the managing director of SUTL EnvironTech which distributes the United States-made Sdst product in Singapore. Photo: Sdst

The SUTL website states that Dr Yeo was awarded his PhD from the department of microbiology at the National University of Singapore.

Before SUTL EnvironTech, he was with Cornell University in the US as an academic staff member at the College of Veterinary Medicine. Sdst is developed by SD Labs in Terryville Connecticut. Dr Yeo is listed on the website as an advisor to SD Labs. The website also includes a safety sheet relating to Sdst. In an online statement about Sdst, Dr Yeo provided the following material:

Why is Sdst effective against Covid-19?

Sdst contains a special antimicrobial active that is very persistent as well as effective against bacteria, fungi and viruses (as compared to antibacterial products which protect only against bacteria). Sdst also contains the National Environment Agency-recommended ingredients (eg. quaternary ammonium compound) that are proven to be effective against Covid-19 and similar strains of coronavirus.

Sdst molecularly bonds to any surface semi-permanently and imparts antimicrobial activity to the treated surface. This physically controls and ruptures the target organism's cell membrane on contact, effectively killing the microbe.

Sdst has been tested to be effective against the H1N1 (flu virus), as well as against the norovirus (non-enveloped).

What makes Sdst more effective than regular sanitisers and disinfectants? What differentiates Sdst from regular disinfectants and sanitisers is how it continues killing microbes (bacteria, fungus and viruses) even after drying. Other cleaning agents kill germs during the disinfecting process, but the killing stops once the solution dries out, hence the need for repeated rounds of disinfecting.