

Singapore launches national standard to validate antimicrobial disinfectant products

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SS 705 provides a first-of-its-kind Singapore-developed assessment to test the effectiveness of antibacterial, antifungal and antiviral potency, as well as durability of surface disinfectants and coatings.



As public awareness of hygiene and infection control grows in a post-pandemic world, Singapore has launched a strategic national standard to strengthen public health and industry accountability in the rapidly expanding disinfectant market.

Jointly developed by the Duke-NUS Centre of Regulatory Excellence—Standards Development Organisation (CoRE-SDO) and Enterprise Singapore (EnterpriseSG), through the Singapore Standards Council (SSC), the new Singapore Standard (SS) 705 provides a robust, science-based methodology of assessing the effectiveness and durability of antibacterial, antiviral and antifungal surface disinfectants and coatings.

SS 705 equips manufacturers with a credible validation framework for their claims, offers regulators a consistent reference for monitoring product quality and empowers consumers with confidence in the choices they make to protect their homes, workplaces and communities.

SS 705 provides a comprehensive and rigorous means of assessment that covers microbe selection, culture preparation, test methods and result analysis for surface disinfectants and coatings on non-porous materials, which includes plastics, metal and ceramics.

In leveraging SS 705, producers of surface disinfectant products can provide quality assurance to customers that their solutions can meet performance claims. This will provide users with increased confidence in their products, building brand trust and helping to cultivate customer loyalty in the long run. Industry regulators and stakeholders can also tap SS 705 to establish a baseline level of standardised testing and explore new industry benchmarks or regulations.

Dr Lim Kaiyang, Manager, Research, Development and Application (APAC), Corbion, who led the committee of experts in the drafting of the standard, explains: “Standardised testing methods like SS 705 are crucial in ensuring the reliability of antimicrobial coatings. With clear guidelines, manufacturers can effectively validate product performance, including durability and stability, offering businesses and consumers greater confidence in the solutions provided.”

Professor John Lim, Executive Director of the Centre of Regulatory Excellence at Duke-NUS said: “With the increasing use of antimicrobial coatings in public and healthcare spaces, it is important to have a rigorous and standardised approach to assess their durability and effectiveness. SS 705 sets a clear, standardised way to assess how long antimicrobial coatings remain effective on surfaces they are applied to. This helps regulators, manufacturers, and consumers make more informed choices to enhance protection of public health.”

Ms Choy Sauw Kook, Director-General (Quality and Excellence) at Enterprise Singapore added: “Standards and conformance are very important in public health as they provide consumers with assurance that the products they use are of high quality and safe. The launch of SS 705 marks a significant step toward promoting standardisation and accountability among producers of surface disinfectants and coatings, raising the bar for the industry to fulfil its product promises.”

SS 705 was developed by the Working Group on Antimicrobial Protection, which comprises representatives from the Government, industry associations, testing and certification bodies, research institutions and industry stakeholders.