3M™ Clean-Trace™ Hygiene Management System for Environmental Surfaces

Contaminated environmental surfaces are an important source for transmission of healthcare-associated infections. Healthcare workers can contaminate their hands by touching contaminated surfaces and then transfer pathogens to their patients. The maintenance of a clean environment is an important factor in reducing the risk of cross contamination. Unmonitored organic residues can build up to high levels on surfaces if adequate cleaning procedures are not implemented. Surfaces, although appearing visibly clean, can still harbor significantly high levels of contamination.

The 3M™ Clean-Trace™ Hygiene Management System provides an objective and quantifiable “real-time” approach to assess and measure cleaning efficacy. The system is based on the measurement of levels of ATP present on an environmental surface. ATP is the molecule that provides energy for cellular metabolism and is present in all living cells. It is present in any organic residue, e.g. body fluids, skin cells and microorganisms, making ATP an excellent marker for organic contamination or contamination from a biological source.

A 3M™ Clean-Trace™ ATP Surface Test is used to swab a selected test point. The test is activated and the swab is brought into contact with the test enzyme solution. The test is then placed in the 3M™ Clean-Trace™ Luminometer. This measures the light generated by the enzyme solution and produces a result expressed in Relative Light Units (RLUs). The greater the level of ATP present on the swab, the greater the amount of light generated by the test and consequently, the higher the RLU level produced.

The 3M™ Clean-Trace™ ATP Surface Test can be performed in less than 30 seconds, providing a real-time result that indicates the cleanliness of the surface tested. This provides an opportunity to take any corrective action required such as re-cleaning and re-testing the surface.