

# 3M<sup>™</sup> Instant Microbe Removing Wipes utilize unique technology for instant removal and entrapment of 99.9% of microbes

Numerous facilities and businesses have an urgent need to address the risk of infectious diseases and reduce the possibility of transmission. These challenges also provide opportunities to increase cleanliness and peace of mind for patients, guests and employees, while protecting brands and reputations in the community. To answer these needs, 3M has developed a new-to-the world technology in 3M<sup>™</sup> Instant Microbe Removing Wipes.

When moistened, 3M Instant Microbe Removing Wipes remove 99.9% of microbes—including viruses such as SARS-CoV-2 (COVID-19), bacteria and spores—from hard, nonporous surfaces. Microbe removal occurs instantly, as the surface is wiped.

In addition, microbes are retained within the wipe, virtually eliminating microbial transfer and the potential for cross-contamination among surfaces. This enables a single moistened wipe to be used effectively on multiple surfaces prior to disposal. Also, because microbes are trapped in the wipe rather than pushed to surface edges, cracks or crevices, establishment of reservoirs and breeding grounds for pathogens can be decreased.

### How 3M Instant Microbe Removing Wipes Work

3M Instant Microbe Removing Wipes incorporate proprietary technology so, when moistened, they electrostatically remove, entrap and retain microbes.

The wipes possess a net positive charge on their fibers while microbes have a net negative charge. When these charges interact, the microbes become trapped within the wipe, virtually eliminating their release as well as the potential for cross-contamination among surfaces.

3M Instant Microbe Removing Wipes contain no biocidal agents and achieve instant microbe removal as surfaces are wiped during cleaning.

### A Microbe Removal Study

A third party study conducted during development evaluated the removal of bacteria from a hard, non-porous surface. Glass slides were inoculated with an average of 830,000 *Staphylococcus aureus* then cleaned with a standard wipe or a 3M Instant Microbe Removing Wipe. Figure 1 shows that using a standard wipe moistened with water, an average of 71,000 bacteria remained on the glass slide surface. Using the 3M Instant Microbe Removing Wipe moistened with water, an average of 8 bacteria remained on the surface.



Figure 1.

# A Microbe Transfer Study

A 3M study evaluated microbe transfer from wipes to a hard, non-porous surface. An average of one million *Clostridium sporogenes* were inoculated onto a standard disposable wipe and a 3M Instant Microbe Removing Wipe, which were moistened with water and wiped across a clean surface. Results in Figure 2 show that the standard disposable wipe transferred an average of 22,000 *Clostridium sporogenes* (2.2%) to the surface while the 3M Instant Microbe Removing Wipe transferred an average of 600 *Clostridium sporogenes* (0.06%) to the surface.



Figure 2.

# A Study of Cleanliness in a Healthcare Facility

A healthcare facility evaluated the cleanliness of eight high-touch non-porous surfaces within eight patient rooms. Results before cleaning; after cleaning using a disposable disinfecting wipe; and after cleaning using 3M Instant Microbe Removing Wipes moistened with a quaternary disinfectant were compared. Figure 3 indicates that using the disposable disinfecting wipe, results met the "clean" threshold across all rooms on one of the eight hard, non-porous surfaces. Using 3M Instant Microbe Removing Wipes, the clean threshold was achieved across all rooms on six of the eight hard, non-porous surfaces.





## **Applications in Numerous Markets**

3M Instant Microbe Removing Wipes are designed for fast, confident removal of microbes to enable rapid turnaround of high touch hard, non-porous surfaces. Effective with water, the wipes can be used in situations when cleaning chemicals are not available or where chemicals and their potential to cause odors or skin irritation may be undesirable.

The innovative wipes have applications in numerous market segments including education, offices, factories and warehouses; retail; hospitality and transportation and many more. Some examples of locations or items to be cleaned include door handles, classroom desks, workstations, shopping cart handles, retail checkout lanes, registration desks and the hard, non-porous surfaces in ride-sharing vehicles.

For applications that require disinfection such as healthcare, 3M Instant Microbe Removing Wipes are compatible for use with quaternary disinfectants and alcohol quaternary products. Facilities may include hospitals, clinics, long-term care and assisted living. Some examples of areas to be cleaned would be patient and resident rooms, operating rooms, nurses' stations and common areas.

## Ease of Use with Water or Disinfectants

3M Instant Microbe Removing Wipes are packaged dry but must be wet in order to remove microbes. If wipes remaining in the container dry out, they can simply be remoistened for use.

3M Instant Microbe Removing Wipes can be used with water and are also compatible with quaternary disinfectants and alcohol quaternary products. The wipes can be substituted directly for currently used wipes and cloths, minimizing staff re-training. Instructions for use and proper techniques should always be followed.

After cleaning, 3M Instant Microbe Removing Wipes will not leave residue or film on a surface. 3M Instant Microbe Removing Wipes should be disposed of in accordance with the facility disposal requirements. Proper procedures for discard should always be followed. When a roll of 3M Instant Microbe Removing Wipes has been used, its container is easy to refill.

# **Unique Technology**

3M Instant Microbe Removing Wipes feature new-to-the world technology and remove 99.9% of microbes—including viruses such as SARS-CoV-2 (COVID-19), bacteria and spores—from hard, non-porous surfaces. 3M Instant Microbe Removing Wipes, which must be moistened to remove microbes, can be used with water and are also compatible with quaternary disinfectants and alcohol quaternary products.

Microbe removal occurs instantly, as the hard, non-porous surface is wiped. Further, microbe retention within the wipe virtually eliminates the potential for cross-contamination, enabling a single wipe to be used on multiple hard, non-porous surfaces prior to disposal, and can decrease the establishment of unwanted microbe reservoirs and breeding grounds for pathogens.

3M Instant Microbe Removing Wipes are designed for fast, confident removal of microbes to enable rapid turnaround of high touch hard, non-porous surfaces. The unique, patented wipes are expected to have numerous applications as facilities and businesses address the risk of infectious diseases to increase cleanliness and peace of mind for patients, guests and employees, while protecting brands and reputations.

For more information about 3M Instant Microbe Removing Wipes, refer to 3m.com.sg/MicrobeWipes