Considering manufacturing quality

The purpose of environmental decontamination is to keep staff, healthcare workers, and hospitals safe from infection. To ensure this objective is met, the wipe itself must be safe to use.

Manufacturing, or simply where the wipe has come from, is often overlooked in the selection of a disinfectant wipe. However, end-to-end manufacturing quality is critical to ensure that products used in healthcare settings are safe for use.

Despite containing biocidal ingredients, there have still been instances where manufacturers have struggled with contamination that has occurred during the manufacturing process.

3 key opportunities for contamination

1 LIQUID FORMULATION

Water is a crucial ingredient in the production of disinfectant wipes, particularly wet ones. However, it provides a reservoir for contamination.

Some microorganisms can live in water, particularly those able to form biofilms. Resembling a protective slime-like layer, biofilms are difficult to remove, making them a challenge for manufacturers maintaining safe equipment.

2 WIPE SUBSTRATE

Next, the formulation must be loaded onto the wipe material or 'substrate'. But where does the wipe come from?

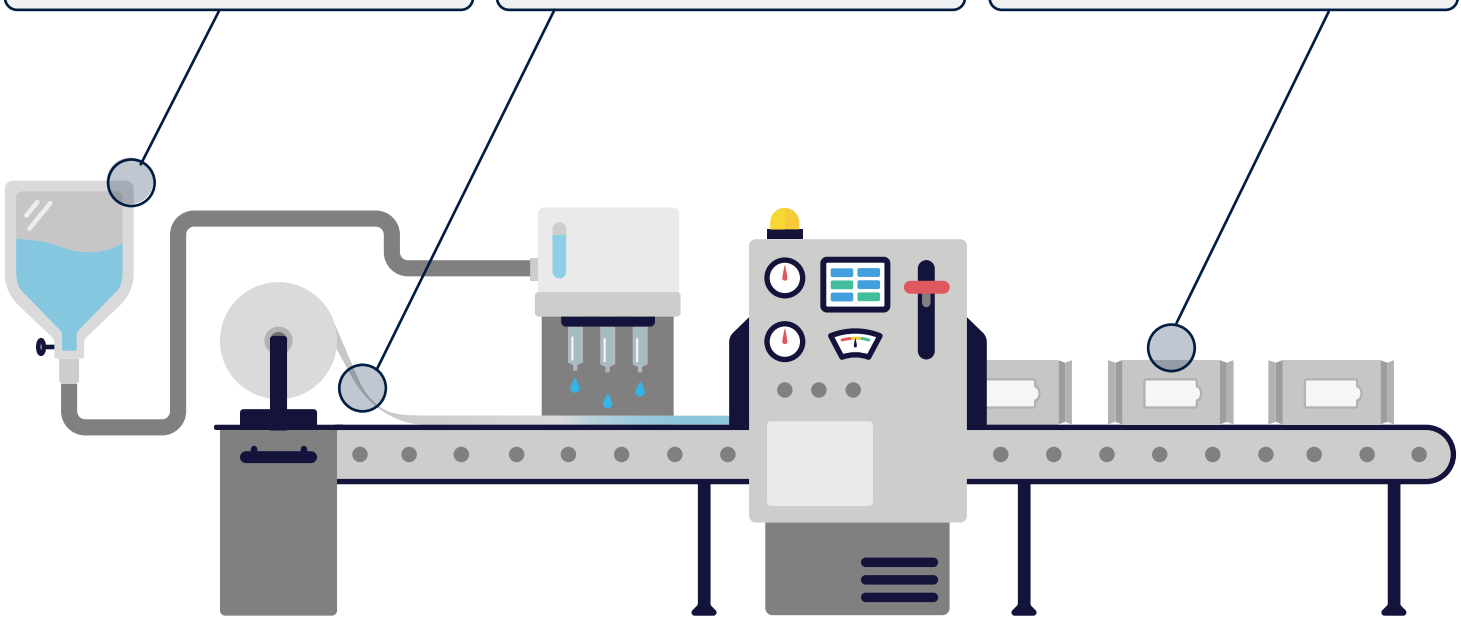
There are many raw materials involved in wipe manufacturing, from biocidal ingredients to substrate, through to packaging. Each presents an opportunity for contamination, so it is important to identify and manage each component.

3 PACKAGING

Finally, the wipes are packaged.

Most packaging is designed to preserve the integrity of the product. Meaning that the wipe and its active ingredients are kept in their intended state from when the pack is sealed, to when it is opened for use.

It is critical that there is no risk of contamination before the pack is sealed and shipped.

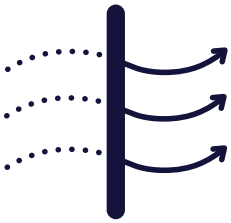


Safety management guidelines

If used for surface cleaning and disinfection of medical devices, disinfectant wipes should comply with regulated guidelines to ensure their safety for use. However, manufacturers are not required to meet extensive quality controls, so it is important to take self-initiative to keep everyone safe.

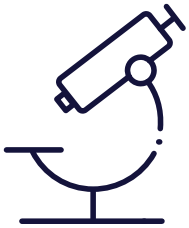
Disinfectant wipe providers should have end-to-end quality manufacturing protocols in place to eliminate the risk of contamination during production. Such as formulation filtration, regular microbiological batch testing, and well sourced raw materials.

Minimising the risk of contamination



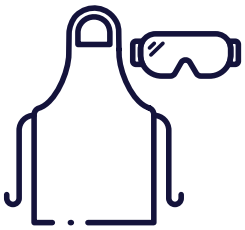
Formulation filtration

Filters integrated into liquid formulation loading process can remove microscopic particles as small as single microorganisms.



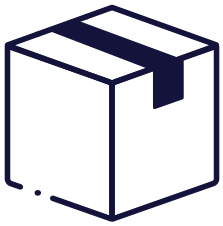
Microbiological testing

Regular samples can be taken from raw materials and final products to monitor their associated bioburden.



Personnel protocols

Use of personal protective equipment can help lower the risk of contamination introduced by manufacturing personnel.

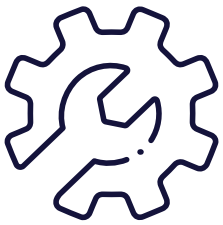


Quality raw materials

Purchasing of formulation ingredients, substrates, and packaging from reputable manufacturers can reduce the risk of contamination.

Cleaning protocols

Each section of the manufacturing environment should be suitably decontaminated and audited for safety.



Continuous improvement

Manufacturers should be committed to investing in the long-term safety of manufacturing, to ensure continuous improvement.

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