

CLEANROOM CONSUMABLES PACKAGING EXPLAINED

THE IMPORTANCE OF CLEANROOM CONSUMABLES PACKAGING

Products sensitive to contamination, including pharmaceuticals, microelectronics, and medical devices, require manufacturing and packaging in a strictly controlled environment called a 'cleanroom'. Cleanroom consumables like gloves, disposable garments, goggles, and facemasks worn by cleanroom operators during the manufacturing process must also be packed in cleanroom-compatible plastic packaging within the cleanroom. The packaging must provide the following:



Storage

The packaging must be suitable for holding the consumable during transportation and storage.



Protection

The packaging safeguards the consumable from contamination and various external factors such as light, heat, and moisture.



Traceability

The packaging displays essential manufacturing information, including the lot number, manufacturing date, expiry date, as well as chemical protection levels and usage guidelines.

HOW ARE CLEANROOM CONSUMABLES PACKAGED?

Ansell's cleanroom consumables packaging is primarily made from plastic due to several compelling reasons:



Protection

Cleanroom consumables must be protected from contamination during shipping and handling. Plastic packaging provides a barrier against dust, moisture, and other potential sources of contamination, helping to maintain the cleanliness and integrity of the products.



Sterilization

Many cleanroom consumables are sterilized prior to use, and plastic packaging is suitable for various sterilization methods, such as gamma irradiation or ethylene oxide gas sterilization.



Low Particulates

Plastic packaging is also compatible with cleanroom conditions, where materials with low particle generation are required.



Visibility

Clear plastic packaging allows for easy identification and inspection of the contents without opening the packaging. This is especially important in a cleanroom environment, where minimizing unnecessary handling of materials is crucial.



Convenience

Plastic packaging is lightweight and easy to handle, making it ideal for transport and storage. Additionally, sterile gloves are pair packed for convenience and ease of use, allowing the user to quickly don a pair of gloves without needing to handle multiple pairs.

STERILE GLOVE SAMPLE PACKAGING CONFIGURATION



1 pair
per inner
PE wrap



1 wrap
per sealed
EasyTear
PE pouch



10 pouches
per sealed
outer PE bag
with gamma
irradiation
sticker



20 outer bags
per lined carton
(200 pairs)
Gamma irradiation
sticker affixed
to outside of carton

PACKAGING AND THE ENVIRONMENT

One of Ansell's packaging goals:

100% OF PACKAGING MATERIAL TO BE RECYCLABLE¹, REUSABLE OR COMPOSTABLE BY 2026

Within the Ansell Life Sciences/Cleanroom business, we are dedicated to ensuring that the packaging of our consumables aligns with the Ansell packaging pledge. We are actively implementing various packaging initiatives and strategic priorities to minimise the environmental impact of our packaging on our planet:



**Removal of
"Zero-Use"**



**Sustainable
Configurations**



**Leading
Digital
Transformation**



**Reduction
of Materials
Utilization**



**Minimizing
Shipping
Volume**

SUSTAINABLE CONFIGURATION & MINIMIZING SHIPPING VOLUMES

Fitting more products into packaging units results in less packaging material. Our continuous screening of customer needs helps us to define configurations that still meet those needs while reducing packaging.



OLD



NEW

REDUCTION OF MATERIALS

The launch of our new **SMART Pack™** packaging for our 300mm sterile gloves will see a reduction of the amount of plastic used in the pouch by **56%**³ and the new packing configuration will see a reduction of nearly **1 MILLION** plastic bags annually²



OLD



NEW

REMOVAL OF ZERO USE

In compliance with the EU PPE Regulation 2016/425, we include an Instruction for Use (IFU) leaflet with all our PPE consumables.

As part of our strategic priorities, we are committed to leading digital transformation. This entails utilising digital technology to enhance the functionality and sustainability of our product packaging. **One approach we are adopting is the removal of paper IFU leaflets from shipments destined for regions outside of the EU**, such as North America and Latin America, where IFUs are not mandatory.

This initiative will help us

save 2.53 tonnes of paper annually³



which equates to 5.47⁴ tonnes of greenhouse gas emissions,

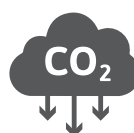


equivalent to 14,672/23,614 less miles/km driven by a delivery van annually⁵.



LEADING DIGITAL TRANSFORMATION

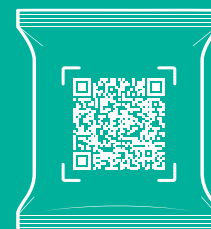
Another initiative we have implemented for IFUs is the reduction in size of the current leaflets for shipments destined for the EMEA (Europe, Middle East, and Africa) and APAC (Asia-Pacific) regions. By reducing the size of the IFUs, we have successfully eliminated 1.33 tonnes of paper usage annually. This reduction corresponds to a decrease of 2.87⁴ tonnes of greenhouse gas emissions, **resulting in a 43%⁴ reduction in the carbon footprint associated with the IFUs.**



Digital IFUs are easily accessible via the product page on www.ansell.com under the 'downloads' section or by **scanning the QR code** on the primary (pouch/bag) consumable packaging. Digital versions are quicker, easier and more up-to-date, scanning the QR code **takes you directly to the real-time information you need.**



or



Download our '[More sustainable packaging – IFUs](#)' leaflet for further information.

➤ **For more information on Ansell sustainability goals please visit <https://www.ansell.com/gb/en/about-us/sustainability>**

¹Packaging recyclability will depend on available disposal options in your community and on the condition of the packaging at the time of disposal.

²Based on 73-701, 83-500, 91-225 sales volumes

³Ansell Life Cycle inventory, 2022

⁴Ansell Life Cycle Assessment, cradle-to-grave, 2022

⁵UK Government GHG Conversion Factors for Company Reporting, 2021, average emission conversion factors for delivery van up to 3.5 ton (diesel)