

LESSENING THE IMPACT ON LANDFILLS

HOW ADVANCES IN SUSTAINABLE MATERIALS ARE DELIVERING ECO-FRIENDLY GLOVE OPTIONS





As the demand for hand protection rises, so too does concern over the environmental impact of these products after use, with gloves ending up as litter or in landfills. Understanding the properties of available eco-friendly alternatives helps safety and operations managers make informed choices when it comes to the most sustainable option.

The recently released Disposable Gloves Market - Global Outlook and Forecast 2021-2026¹ report says demand will rise at a rate of around 10% per annum for the next five years.

That increased usage without consideration of glove material and its impact on the environment will have negative effects, potentially working against corporate sustainability targets and aspirations.



COMMON GLOVE MATERIALS



Among the most common glove construction materials are natural rubber latex, nitrile and vinyl, with each featuring a different breakdown time.

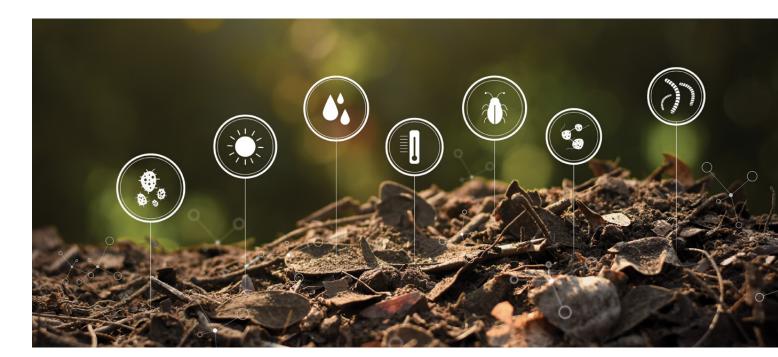
Fortunately, eco-friendly alternatives are available, designed to break down into safer substances in shorter time frames. This is achieved through one of two processes: biodegradation or composting.

44

...designed to break down into safer substances in shorter time frames

"

BIODEGRADABLE VS COMPOSTABLE – KNOWING THE DIFFERENCE



The first step is to determine the difference between 'biodegradable' and 'compostable' breakdown processes.

DEGRADATION

is the breakdown of a material over time.

BIODEGRADATION

is degradation resulting in a significant change in the chemical structure of a material caused by biological activity.

COMPOSTABILITY

is biodegradation within a defined timeframe and specific disposal systems, as measured by the metabolism of polymer carbon by microorganisms using international specification standards.

A material can be biodegradable in one environment but not in another. As such, information on the environmental conditions in which a material is intended to end up after disposal is critical to ensure the biodegradation process takes place. To illustrate, gloves that are intended to be compostable must be sent to industrial facilities to ensure proper disposal and degradation. This is due to the necessary checks that must be carried out prior to disposal to ensure that landfill conditions support the biodegradation process. That said, it must be noted that there are instances in which gloves are no longer suitable for their intended degradation environment. One such case, gloves that have been chemically soiled are no longer suitable for composting. Instead, as in accordance with EU legislation code 15 02 02, chemically-soiled gloves must be incinerated.

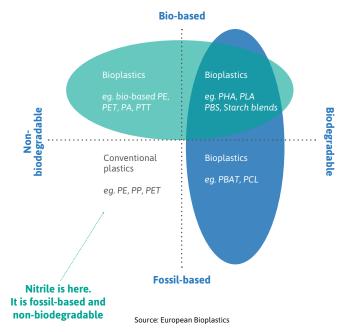


HOW ADVANCEMENTS IN NEW MATERIALS ARE GOOD FOR THE ENVIRONMENT



BENEFITS OF BIOBASED POLYMERS

Compostable gloves are commonly manufactured from plant-based materials, such as a polylactic acid (PLA) blend. Material composition aside, to be considered compostable, a product must meet a set standard as judged by appropriate bodies. Most commonly utilised are the certifications provided by both TUV Austria's OK Compost certification, which is prevalent throughout the European market, and the BPI Certification, which is more common in the North American market.





As concern for the environment continues to grow – at both individual and organisational levels – safety and operations managers are increasingly faced with a dilemma: to meet corporate sustainability goals while still providing effective, quality hand protection solutions. In opting for more eco-friendly glove choices, it is possible to deliver optimal safety while simultaneously lessening negative environmental impact.



Ansell Healthcare Products LLC 111 Wood Avenue, Suite 210 Iselin, NJ 08830 USA

Ansell Healthcare Europe NV Riverside Business Park Blvd International, 55, 1070 Brussels, Belgium

Ansell Limited Level 3, 678 Victoria Street, Richmond, Vic, 3121 Australia

Ansell Services (Asia) Sdn. Bhd. Prima 6, Prima Avenue, Block 3512, Jalan Teknokrat 6 63000 Cyberjaya, Malaysia

Ansell



