



#### UNDERSTANDING GLOVE BIOCOMPATIBILITY

The Ask GIA<sup>™</sup> blog previously discussed the importance of glove biocompatibility, which determines whether a glove will induce an adverse reaction when it contacts the human body. Adverse reactions to personal protective equipment (PPE) can create additional hazards in the user's working environment.

The FDA has established stringent guidelines to ensure the biocompatibility of medical devices, with standards first developed in 1986 and updated in 2016 to adopt ISO 10993-1. Recently, the US Environmental Protection Agency (EPA) has raised awareness about a new biocompatibility concern: exposure to PFAS.

### WHAT ARE PFAS AND HOW DOES ONE COME INTO CONTACT WITH THEM?

Per- and Polyfluoroalkyl Substances (PFAS) are a group of manufactured chemicals used since the 1940s for their oil-, stain-, and water-repellent properties. These substances are found in:



Water



Fire **Extinguising** Foam



Manufacturing **Facilities** 



Food **Preservatives** and Packaging



Household **Products** 







### PFAS ARE HARMFUL BECAUSE THEY

- Accumulate over time in the human body
- ---- Continue exposure years after initial contact

## **HEALTH CONCERNS**



Decreased fertility or increased high blood pressure in pregnant women



Developmental effects or delays in children (low birth weight, accelerated puberty, bone variations, behavioral changes)



Increased risk of certain cancers (prostate, kidney, testicular)



Reduced ability of the immune system to fight infections, including reduced vaccine response Interference with natural hormones, increased cholesterol levels, risk of obesity

### **HOW CAN ONE LIMIT EXPOSURE TO PFAS?**

- Avoid non-stick cookware
- Limit use of grease-proof packaging
- Avoid textiles advertised as waterproof and stainproof

# **CHOOSE PFAS-FREE GLOVES FOR ENHANCED SAFETY**

PFAS-Free Gloves contain no detectable levels of PFAS and must undergo strict scientific testing standards. SW gloves are tested against the latest EN 17681-1:2022 and EN 17681-2:2022 standards, ensuring no PFAS presence in the glove material.

We prioritize your health and safety by offering gloves free from harmful materials. SW is dedicated to sustainability and reducing persistent environmental pollutants. Our commitment is reinforced through advanced scientific testing, setting a new benchmark for safety and sustainability.







