SICEN

Protection against infective agents



Protective clothing: a necessary line of defence

2020 is a year that will be forever in our memories as we got confronted with a pandemic the 21st century hadn't seen yet. The outbreak of the Covid-19 virus reminded us of how important personal protective equipment is. Not only to protect ourselves, but also to protect others. As the European market leader, Sioen could not stand aside and watch this happen. At Sioen we not only produce highly technical protective clothing, but we also strive to find a solution for the need of our customers. We immediately considered our technical fabric Flexothane® Kleen as a possible solution for this worldwide health crisis we are facing.





Protection against infective agents

In response to this health crisis, Sioen examined the compliance of its Flexothane® Kleen garments to EN 14126:2003 standard: Performance requirements and test methods for protective clothing against infective agents. This standard specifies requirements and test methods for re-usable and limited use protective clothing providing protection against infective agents. These materials must protect the skin, and therefore the wearer, against possible contact with biological substances and prevent the spread of germs.

The EN 14126 only covers performance requirements and always goes together with a chemical standard, in case of Flexothane® Kleen this is EN 14605. The EN 14126 standard comprises 4 test methods to determine the level of protection against several specific biological dangers. The tests differ depending on the kind of biological danger (bacteria or viruses) and the nature of contamination (particles, fluids or aerosol).

Flexothane® Kleen has specifically been tested on its resistance to penetration under pressure by bloodborne pathogenes (ISO/FDIS 16604). A liquid contaminated with a bacteriophage is used for this kind of test.

Technology combined with international standards

Flexothane® has originally been engineered to form a durable and impenetrable barrier against water and wind. The fact that Flexothane® is waterproof is very important in the fight against viruses that are spread through body moisture, saliva or nasal mucus. The polyurethane coating on the stretchable knitted base makes the fabric supple, highly tear resistant and machine washable. Moreover, the Flexothane® Kleen range is especially designed for industries that require an optimum hygiene, hence it is possible to wash these garments at 95°C! Likewise, these garments make for an ecological alternative for all the disposable garments.

Our range of Flexothane® Kleen garments all comply to the international standard EN 14605 for protective clothing against liquid chemicals. More specifically they are labelled as Type PB [4], meaning that these offer partial body protection with spray-tight connections between different parts of the clothing. Partial body protection garments offer protection to specific parts of the body against permeation of chemical liquids, such as our Nantou apron, our Cork sleeves or our Killybeg bib and brace.

Design and comfort matter when it comes to protection

Our designers have to take into account many requirements when designing a protective garment, after all, the safety and health of people depend on it. For example, viruses, bacteria and spores are small enough to penetrate through opening of sewn seams so welded or taped seams are recommended. All the seams of our Flexothane® garments are high-frequency welded.

Furthermore, the garment cannot have features which may collect liquid chemicals and hold them onto the fabric surface like unprotected pockets. Attention to detail is vital and our designers make sure that our clothing is designed in such a way that no penetration of chemicals/infective agents is possible.

Flexothane* is strong, supple and light. It is a 150% stretchable fabric. It doesn't restrict your movements in any way, in fact, it moves with you and thus ensures your freedom of movement.

Have a look at our website and choose the right protective clothing for you. You may need the Morgat jacket or you might prefer a longer coat like the Rigi. Or maybe our Boulogne apron does the trick for you.



Flexothane® Kleen











Rigi - 4415A2FK0

Coat



Morgat - 4391A2FK0

Jacket



Killybeg - 6639A2FK0

Reversible bib and brace



Boulogne - 8133A2FK0

Apron with sleeves



Nantou - 8195A2FK0

Apron



Cork (Kleen) - 8161A2FK0

Sleeves



What is Flexothane®?

Flexothane® is a technical fabric that offers you excellent protection. The polyurethane coating on a stretchable knitted base makes Flexothane® water and windproof, comfortable, noiseless, 150% stretchable, supple, highly tear resistant and machine washable.

Supple and extremely comfortable

Flexothane® is a flexible and supple fabric. It is 150% stretchable and doesn't restrict your movements in any way. On the contrary, it moves with you.

Strong, light and noiseless

Flexothane® is resistant to rough handling and foul weather. It is a very light fabric but the fibres that are used are exceptionally strong and resistant. Garments manufactured from Flexothane® are long lasting.

Ecological

In the production of Flexothane® we do not use chloride. Consequently when disposing of Flexothane® after use, harmful substances are not released into the environment.



Technology

Flexothane® consists of a high grade polyurethane coating on a stretchable knitted base and offers an excellent protection against rain and wind.

Flexothane® has been specially engineered to form a durable, impenetrable barrier against water and wind, while retaining a high level of wearer comfort. The polyurethane coating forms an impenetrable barrier and the knitted base assures a high tear resistance and a great flexibility

in addition to absorbing body moisture. The seams of all Flexothane® garments are

high-frequency welded. The Flexothane® fabric is a result of the groups' vertical integration, where the entire production process is controlled from fabric to finished product. Flexothane® is produced on the transfer coating lines of the Sioen industries group. Extended durable protection against hydrolysis is key to this fabric.



