ABOUT OUR COMPANY

We understand that the toughest environments require the toughest garments. That is why we place continued emphasis on innovation, research and development, ensuring that our protective workwear always meets the highest standards.

John Jacobs
Managing Director

1871
Wappingers Falls, New York, USA
6 ladies at 6 sewing machines turn out the first pairs of commercial overalls.

1882
In partnership with UK based Lybro Ltd, Sweet-Orr and Lybro is formed and set up in Cape Town.

1919
Elsies River, Cape Town, RSA
Sweet-Orr moves to a new factory due to rapid growth.

1969
Sweet-Orr moves into a modern manufacturing plant of 5500sqms and a production capacity of 3500 garments per day.

TODAY

Close to 150 years, "We never let you down" remains our motto as we continue to supply superior protective workwear to the world.
Flames and fires pose a real risk in a variety of work environments. Specialised flame retardant workwear is essential when it comes to protecting workers from superficial burns, serious injury and even loss of life.

Flame retardant workwear not only protects those who work in high risk environments, but can also afford workers a little more time to contain accidents at work, preventing large scale damage to property and the environment.
What is Flame Retardant fabrication?

There are two types of protective fabrications:

1. Flame Retardant - these fabrics are chemically treated after they have been woven, to give them the properties required to withstand flames.

2. Inherently Flame Retardant - these fabrics are made by weaving hardwearing microfibres that naturally have the powerful properties required to withstand bursts of heat and exposure to flames. Because these fabrics are inherently non-flammable, they offer reliable protection against flames for the entire lifespan of the fabric.

Whether fabrics are Flame Retardant or Inherently Flame Retardant, they share three basic functions:

1. They can help prevent fires from starting.
2. They limit the spread of fires.
3. They minimise the potential damage caused by flames.

Our Flame Retardant garments are made for everyday use. They comply with local and international safety standards and are easy to wear.

Sweet-Orr’s Flame Retardant garments can take the heat. They are built to withstand ordinary wear and tear and won’t melt in harsh environments.

In addition to providing everyday protection, our Flame Retardant protective wear prevents serious burns and can even save lives when accidents happen in the workplace.
How do FR and IFR fabrications work?

Understanding how the fire cycle works is critical to understanding how Flame Retardant and Inherently Flame Retardant materials work:

An initial burst of heat or a flame can cause many materials to burn and release flammable gases. These gases then combine with oxygen and create larger flames. The cycle continues rapidly, and in seconds a room can be engulfed in flames.

Flame retardant materials interrupt this cycle by not releasing flammable gases when they come into contact with flames, which stops the combustion process. Instead, they either smolder slowly or char - forming a layer between the fabric and the flame, or self-extinguish completely. Some flame retardant materials even release gases like water and nitrogen, diluting the oxygen and flammable gases - 'retarding' the spread of the fire.

Flame retardant materials are more common than one might think, and are commonly found in electronic equipment, soft furnishings and passenger vehicles.

Whether you opt for Flame Retardant or Inherently Flame Retardant fabrication, there are some important features and benefits that both products share.

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**FEATURES**

- Flame Retardant materials char when they come into contact with flames, creating a thin layer of protection between workers and flames.
- Many Flame Retardant fabrics are able to self-extinguish when they come into contact with flames.
- Quality Flame Retardant products offer protection from a variety of flames, including flames caused by sparks and chemical reactions.
- The manufacturing of flame retardant products is regulated. Sweet-Orr products comply with all the relevant manufacturing and safety standards, including SABS ISO 9001, SANS 1387, EN 531, EN532 and EN533.
- Sweet-Orr’s Flame Retardant workwear is made to ensure comfort and durability.

**BENEFITS**

- Flame Retardant workwear is your first line of defence against fire-related life-threatening injuries in the workplace.
- Flame Retardant workwear helps prevent serious injuries that are commonly caused by flames.
- Unlike many synthetic fibres, flame retardant clothing doesn’t melt when it comes into contact with fire.
- Flame Retardants disrupt the fire cycle and can help slow down or stop a fire.
- Well constructed Flame Retardant workwear also protects workers from intense heat caused by fires.

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Flame Retardant or Inherently Flame Retardant?

Deciding whether to go Flame Retardant or Inherently Flame Retardant should be determined by your intended use and your environment.

Flame Retardant fabrics are useful in environments where the risk of flame-related incidents is low to moderate. Sweet-Orr’s Flame Retardant products provide adequate protection to a variety of workers, including boilermakers and welders. However, as they are chemically treated, one must make sure that they are laundered and cared for correctly. Many of the chemicals used in the manufacture of these fabrics are water soluble, so dry cleaning or incorrect laundering may cause these fabrics to lose their protective properties over time.

Inherently Flame Retardant fabrics, like DuPont™ and Nomex®, thrive in workplaces where the risk of flame-related incidents is constant. These fabrics are standard issue in high-risk environments like oil refineries, because they can be trusted to provide premium protection at all times. The protection is woven into the fibres, thus there is no risk of the flame retardant properties breaking down or washing out over time. In fact, they remain noncombustible for the duration of the lifespan of the fabric.
Flame Retardant
Taking The Heat

Manufactured using Flame Retardant (FR) and Inherently Flame Retardant (IFR) materials, we have a broad range of garments that can take the heat in low-risk and high-risk environments.

Flame Retardant protective garments are made by treating woven fabrics with chemical compounds, before assembly. Using an immersion process they are given their protective properties by a combination of chemicals, which may include substances such as Dialkyl Phosphono Propionic Acid amide-N and Methylol.

Inherently Flame Retardant garments are made by weaving and blending fibres and materials that naturally have the properties required to keep workers safe, into tough fabrics like DuPont™ and Nomex®.

Protective workwear poses a number of challenges. It needs to be comfortable, functional, durable and safe. Our workwear makes use of effective non-toxic flame retardant properties and inherently flame retardant fibres to ensure that workers are protected when they’re in the line of fire.

Flame retardant fabrics aren’t all equal and expert knowledge is required to select the right combination of chemical compounds or inherent fabrications to protect workers in different environments. At Sweet-Orr, our skilled team can help you choose flame retardant continental suits, jackets, trousers and boiler suits for a variety of industries and applications.
We all know how quickly fires can spread. A simple flame can turn into a life-threatening fire in a matter of seconds. Sweet-Orr supplies cutting-edge flame retardant workwear for various industries.

CERTIFICATIONS

At Sweet-Orr we benchmark our continuous improvement processes against world class standards and maintain national and international quality standards.

Our Flame Retardant clothing complies with the following standards:

**SANS 434**

**EN11611**
Protection against hazardous welding techniques and situations, causing higher levels of spatter and radiant heat.

**EN11612**
Protection from radiant, convective and contact heat, as well as molten metal splashes.

**EN14116**
Performance requirements for the limited flame spread, when fabrics have occasional and brief contact with small flames.

SOMETHING ELSE...
Manufactured using Flame Retardant (FR) and Inherently Flame Retardant (IFR) materials, we have a broad range of garments that can take the heat in low-risk and high-risk environments.

Acids and corrosive chemicals pose a great safety risk in many environments. Our Acid Repellant (AR) collection protects against harsh and corrosive substances.

Working double duty, our Flame Acid range boasts Flame Retardant (FR) and Acid Repellant (AR) properties for use in complex environments with multiple safety risks.

Fabricated in flame-resistant materials, the Sweet-Orr Arc Flash range is designed with electrical engineers in mind - giving the wearer protection from flames and heat in the event of an electrical arc flash or thermal hazard.