





# **SAFR**FLAME RETARDANT FIBRES



## **CELLULOSIC FIBRES FROM NATURE**



**SAFR fibre is a sustainably produced inherently flame - retardant cellulosic fibre.** This fibre is 100% plant based, made from wood pulp, sourced from sustainably managed forests and manufactured in plants that adhere to highest global norms on environmental responsibility.



### **Benefits**







Breathable



Skin Friendly



Moisture Management providing comfort

### **Fibre Portfolio**

1.5 dx 40 mm   $1.5 ddx 44 mm$   $2 dx 51 mm$	1.5dx40mm	1.5ddx44mm	2dx51mm
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<sup>\*</sup>Higher denier and cut length available on request

#### Fibre Properties (Applicable to some available variants)

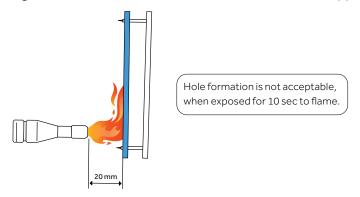
Denier	Tenacity	Elongation
1.81	3.1	14.61
1.53	2.85	14.08

**SAFR** fibres's properties are equivalent to viscose fibres.

OEKO-TEX - **SAFR** fibres is OEKOTEX certified and listed on ACP.

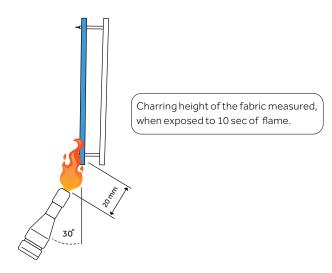
Our fabric blend of **SAFR** fibres with Para Aramid in a ratio 50:50 with **300 GSM Woven fabric** passes flammability test as per **ISP 15025.** 

**Surface ignition** - using 50/50 Birla Viscose<sup>TM</sup> FR and Para Aramid - flame applied to the surface of the fabric.



**SAFR** fibres pass the surface ignition test as **NO hole formed** in the **SAFR** fabric (As per standard procedure, the hole size should be less than 5mm) compared to the other cellulosic fibres.

**Bottom edge ignition –** using 50/50 **SAFR** fibres and Para Aramid applied to the bottom edge of vertically oriented specimens.



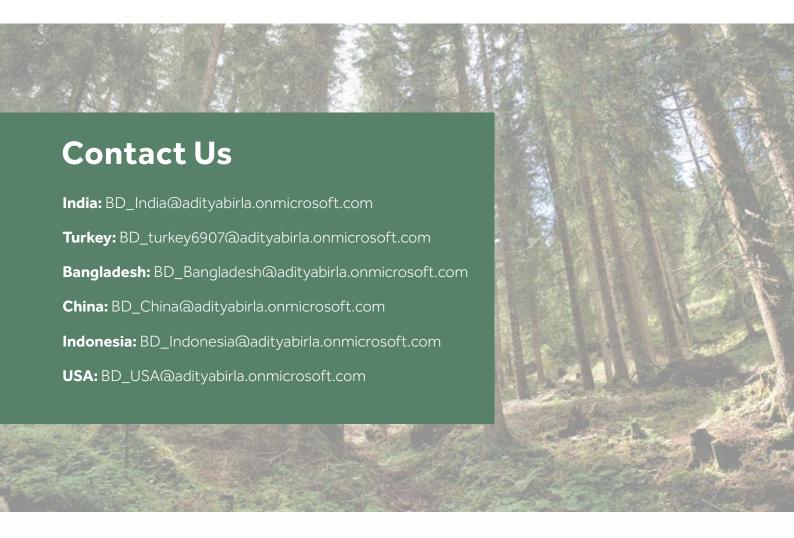
**SAFR** fabric had shorter char lengths (3.5–4 cm) compared to other cellulosic FR fabrics (12-16 cm).

The flame retardant **SAFR** fibres can be blended with other high-performance fibres to produce unique protective clothing solutions for a variety of industrial applications where it does not compromise on the product performance of protection against fire and at the same time provides breathability and comfort preventing heat stress.

**SAFR fibres have Flame retardant properties (LOI > 28.0)** and finds its application in fire suits, protective uniforms, and technical textiles.

Fabrics and garments crafted with these fibres are **soft, comfortable, and breathable.** As it is **100% plant based** and made from wood pulp this fibre provides good moisture management, which reduces the risk of a heat stroke.

Our commitment to the environment and to our customers has always been strong. Today, the alignment of values between them is what drives us to bring new and better products to our industry. With our global presence throughout the entire value chain- from plantation to pulp, to fibre and to fashion - we, through our business development platforms, facilitate our value chain partners (spinners, weavers, processors and garmentors) to build business bridges across geographies.



#### For further information, contact us at www.birlacellulose.com

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