Viscose Rayon

DFG™

The viscose rayon fiber "DFG" in which flame retardant agent is incorporated. Since it is a viscose rayon fiber which has the flame retardant element in mixture, it excels in flame retardant durability, and further has soft hand and feel with moisture-retaining capability of regular viscose rayon fiber. In addition, it is eco-friendly because it is made out of cellulose having biodegradability.

1 ADDING FLAME RETARDANCE TO CELLULOSE

- DFG has excellent hygroscopicity and water absorbency like regular viscose rayon fiber.
- DFG has flame retardance while maintaining its unique texture and feel of regular viscose rayon fiber.
- DFG is excellent in the durability of flame retardance, and maintains its performance even after washing.
- Limiting oxygen index (LOI), an indicator of flame retardancy is 28 or more. (Test method is JIS L1019 E)

2 THERMAL CHARACTERISTIC

- DFG produces no shrinkage and no melt drip when in contact with heat of flame, therefore it does not deform and shrink due to heating like synthetic fibers.
- DFG demonstrates flame retardance by carbonizing action. Also, unlike molten fibers such as polyester, it does not melt down and stick to the skin when burned. (Please check aptitude, when you mix with other materials)

3 COMBUSTION GAS

- DFG does not contain halogen, and further does not generate poisonous halogenide gasses during combustion.
- DFG generates less smoke when combustion compared with other fibers, and cyanide gasses are not generated.

4 DISPOSAL METHOD IS EASY.

- Since it is a cellulose, DFG can be discarded like cotton. Special processing is unnecessary.

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"DFG" is Daiwabo's trademark in Japan.

The use of phosphorus-based flame retardants enables shape retention and flame retardant performance through carbonization.

Comparison with flame retardant polyester in flammability test. (Flame contact area.)

Testing with flame retardant polyester.

- Flame retardant polyester melts, and gets a hole.
- Hot molten material may adhere to the skin.

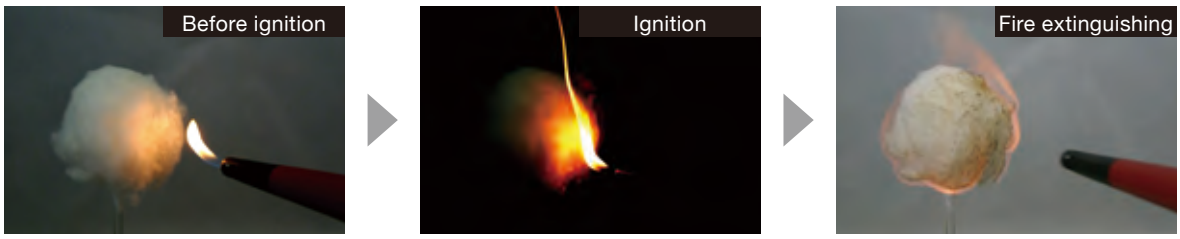
Testing with DFG®

- DFG enables shape retention through carbonization.
- Since it is not a molten fiber, there is no adhesion of molten material to the skin.

• Standard : JIS L 1091 A-1 method Sample: 200 g/m² spunlace

Comparison with regular viscose rayon fiber in simple flammability test.

Regular viscose rayon fiber



Even if the source of the fire is extinguished, the ignited flame continues to burn.

DFG®

There is no ignition, just flame contact area burns.

DFG® (After washing.)

•Processing method: ISO6330 2A

The performance is almost the same as before washing.

[Handling and cautions]

•Reconfirm the performance, if using 100% DFG or mixing with other materials. •It does not assure to protect the body from burn, etc. •Use the product only after understanding the intended use, conditions, and environment. •Store indoors at 40°C or below, out of direct sunlight. There is a possibility of discoloration. •Do not use fire or strong oxidizing agents in the vicinity of the storage area. •Do not handle the product in areas where exhaust gases (NOx, SOx, etc.) are generated. There is a possibility of discoloration.