

# «Drop Block» filter paper

## The Fedrigoni Group response to face mask shortage

Fedrigoni Marketing Direction

# A concrete response

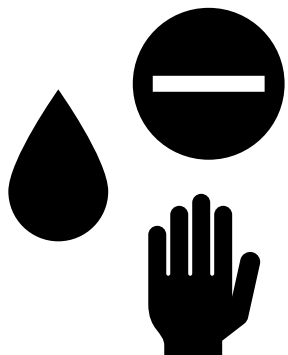


**In order to face the growing difficulty for workers and citizens to find commonly used face masks, the Fedrigoni Group perfects a new filter paper to produce them.**

Thanks to the many years of experience of one of the mill where the 'Filtration and Impregnation' division is based and which has BRC-IoP certification for the production of materials in contact with food, the Fedrigoni Group is currently developing and producing a filter paper that can be used in the production of masks. The important resources made available for research and development allow the Fedrigoni Group to respond with reactivity and versatility to a need of the community at such a difficult time.

# The product «Drop Block»

## What is «Drop Block»



- "Drop Block" filter paper is an evolution of a historical product of the Group used in the chemical industry and suitable for food use.
- Available in two weights -62 g/m<sup>2</sup> and 90 g/m<sup>2</sup> - and composed of pure cellulose and a high percentage of cotton. It has no surface treatments, but its chemical composition is studied in such a way as to make the environment unfavourable for viruses. The two sides of the sheet are equivalent in terms of filtering efficiency.
- It's non-toxic
- Can be recycled with paper once any elastic bands have been removed.
- It has a wet-strength treatment but is not washable.
- It is suitable for contact with food according to Italian and European legislation. It is produced in a BRC certified plant of the Group and registered with the competent health authority for the production of materials in direct contact with food



# The product «Drop Block»

## Certifications

"Drop Block" is suitable for direct contact with food according to the following Community legislation:

- Regulation (EC) n. 1935/2004
- Regulation (EC) n. 2023/2006

and the following Italian legislation:

- DPR 777/82 and subsequent updates and changes
- DM 21/03/1973 and subsequent updates and changes



It is made using raw materials and adjuvants from the positive lists of the current Legislation, complies with the composition and purity requirements established for contact with food for which migration tests are required (commonly defined as "wet/fatty" food [and by extension "dry"]) and complies with any specific restrictions applicable according to the Italian regulation.

The article has been tested for organoleptic inertia (taste and smell test according to UNI EN 1230-1 and 1230-2) and no alterations or differences in smell and taste have been detected.

The screening tests did not report the presence of substances hazardous to human health.

# Latest developments

Microbiological and technological assessments of compliance with UNI EN 14683 (Face masks for medical use - Requirements and test methods) and UNI EN ISO 10993-1 (Biological evaluation of medical devices) to support customers who wish to apply to the the *Italian* Authority for authorization to produce surgical masks:

- the sample was found to be **non-cytotoxic** according to *ISO 10993-5:2009 guidelines*, and the results obtained after in vitro evaluation showed that the sample was **not irritant/sensitising**.
- Differential pressure ("respirability") method *UNI EN 14683:2019 Annex C*  $\geq$  **140 Pa/cm<sup>2</sup>**
- Particle filtration efficiency (PFE) *internal method derived from UNI EN 14683:2019 Annex B* (average value obtained with particles from 0,5  $\mu\text{m}$  to 10  $\mu\text{m}$ ) **99 %**

**This data will be integrated into an updated data sheet during the next week**











# Tests made/on going on "Drop Block"



We are carrying out the tests according to UNI EN 14683 and UNI EN ISO 10993-1 standards. Technical data are available for customers (it is possible to evaluate the issue of a Declaration) but they are NOT equivalent to the conformity to UNI EN 14683 and UNI EN ISO 10993-1 because the conformity to these standards is assessed on the finished product (mask) and also provides a requirement that is not obtainable by our material (non-flammability).

The Drop Block data sheet will be revised as soon as possible with the new data available so far. Further updates will follow whenever we receive new data from external laboratories.



Test	Regulation
Cytotoxicity tests	ISO 10993-1* 
Biocompatibility tests	ISO 10993-1* 
Water repellency	EN 14683 §5.1 
Breathability	EN 14683 §5.2.3 
Microbial cleanliness (Bioburden)	EN 14683 §5.2.5 
Bacterial filtration capacity	EN 14683 §5.2.1 
Spray resistance	EN 14683 §5.2.4 
Particle filtration capacity	internal method derived from EN 14683 §6 

\* Tests carried out on mask made by customer

 = done, positive outcome     = on going