



# RAINSHIELD SACK

TECHNICAL SHEET



- The Rainshield sack is made by two or more paper plies. We laminate the outer ply using PE or PET according to the expected result.
- The air flows from the bottom patch and/or from the longitudinal seam, in order to avoid any inconvenient during the filling process.
- The Rainshield treatment is applied over the print and makes the bag very resistant to humidity and rain.
- The PET lamination is very glossy, the LDPE lamination has a matt effect.

## TEST EVIDENCE

	STANDARD SACK TWO PAPER PLYES	RAINSHIELD SACK TWO PAPER PLYES	STANDARD SACK TWO PAPER PLYES + 1 PE FILM WITH NO HOLES	RAINSHIELD SACK TWO PAPER PLYES + 1 PE FILM WITH NO HOLES	STANDARD SACK TWO PAPER PLYES + 1 PE FILM WITH HOLES	RAINSHIELD SACK TWO PAPER PLYES + 1 PE FILM WITH HOLES
<b>WVTR Standard Condition</b> (g/sqm in 24h)	660	<b>3,5</b>	3,7	<b>1,6</b>	23,1	<b>4,7</b>
<b>WVTR Tropical Condition</b> (g/sqm in 24h)	4300	<b>27,5</b>	24,5	<b>12,2</b>	145	<b>34,1</b>
	STANDARD SACK	RAINSHIELD SACK				
<b>Cobb 60 (g/sqm)</b>	30g	<b>0</b>				
<b>Drop Test (from 60 cm)</b>	3-4	<b>15-20</b>				

## KEY FEATURES



- + BAD WEATHER RESISTANT
- + OUTSTANDING BARRIER EFFECT
- + GLOSS OR MATT FINISHING
- + HIGHER TEARING RESISTANCE
- + IMPROVING THE SHELF LIFE OF THE PRODUCT

## UPGRADES

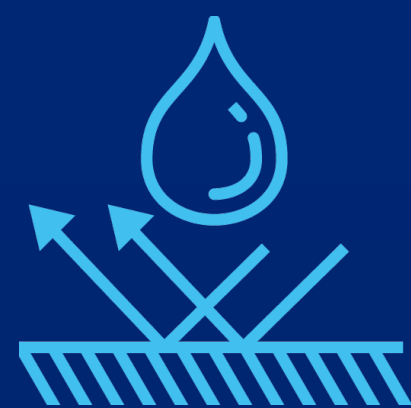


- + HANDLE
- + SEALING VALVE

WVTR is the acronym for Water Vapor Transmission Rate and refers to ASTM E96 - E96M - 16 // Cobb 60 is the water absorptiveness index and refers to UN-EN-ISO 535 // Drop Test refers to ISO 7965-1.

\*The first test (WVTR 23°/ 50% ΔUR) is done under standard conditions: the Rainshield sack has a vapor permeability which is lower than the normal paper bag either without film (7 times less) or with film (14 times less).

\*\*The second test (WVTR 38°/ 90% ΔUR) is done under severe and tropical conditions: the Rainshield sack has a permeability to water vapor which is lower than the normal paper bag either without film (5 times less) or with inner HDPE film (12 times less).



# MOISTSHIELD SACK

TECHNICAL SHEET



- The Moistshield varnish - applied on the outer ply - gives hydrophobic properties to the whole sack.
- The bag is specifically designed to allow an adequate airflow through a gluing labyrinth, avoiding inconvenient related to the filling process.
- The Moistshield varnish is applied over the print and makes the bag resistant to humidity.

## TEST EVIDENCE

	STANDARD SACK (2 PLIES)	MOISTSHIELD SACK
<i>Cobb 60</i> (g/sqm)	30g	5
<i>Gurley Test</i>	20	7200
<i>WVTR Standard Condition</i> (g/sqm in 24h)	578	93
<i>WVTR Tropical Condition</i> (g/sqm in 24h)	740	102

WVTR is the acronym for Water Vapor Transmission Rate and refers to ASTM E96 - E96M - 16 // Cobb 60 is the water absorptiveness index and refers to UN-EN-ISO 535 // the Gurley Test detects the air permeability and refers to UN-ISO 5636-5.

- The MOISTSHIELD sack improves the moisture barrier even without plastic inside, becoming a sustainable product.
- Being part of the Hi-Tech Product Range of Fiorini Packaging, MOISTSHIELD gives hydrophobic properties to the surface of the sack: water will not be absorbed by the paper, but slip away.

## KEY FEATURES



- + MOIST PROTECTION
- + PLASTIC FREE
- + IMPROVING THE SHELF LIFE OF THE PRODUCT

## UPGRADES



- + HANDLE
- + EASY OPEN SYSTEM
- + SEALING VALVE
- + ROLLED BOTTOM



# GH<sub>2</sub>OST SACK

## TECHNICAL SHEET

- Gh2ost is an exclusive registered patent by Fiorini Packaging which replaces the HDPE film with a hydrosoluble polymer.
- This polymer provides a barrier effect to the sack, protecting the product from the moisture. In the meantime, the sack remains fully recyclable and it dissolves in the mixer without leaving any trace of itself.
- Gh2ost is made by 2 white paper plies, enhancing the high quality of the print even if it is a compostable and water-soluble bag.
- Gh2ost is suitable also for food use.

### TEST EVIDENCE

	STANDARD SACK WITH FILM	STANDARD SACK WITHOUT FILM	GH <sub>2</sub> OST SACK
<b>WVTR Standard Condition</b> (g/sqm in 24h)	32-32	153-168	<b>97-109</b>
<b>WVTR Tropical Condition</b> (g/sqm in 24h)	157-158	1033-1102	<b>922-1033</b>

WVTR is the acronym for Water Vapor Transmission Rate and refers to ASTM E96 - E96M - 16.

### PAPER STRENGTH (WHITE 70 G/SQM)

	PAPER	PAPER + GH <sub>2</sub> OST
<b>TEA MD</b> (j/sqm)	188	<b>228</b>
<b>TEA CD</b> (j/sqm)	219	<b>262</b>

TEA is the acronym for Tensile Energy Absorption and refers to UNI-EN-ISO 1924-3.

### KEY FEATURES



- + WATER-SOLUBLE PACKAGING
- + MOIST PROTECTION
- + COMPOSTABLE
- + FULLY RECYCLABLE