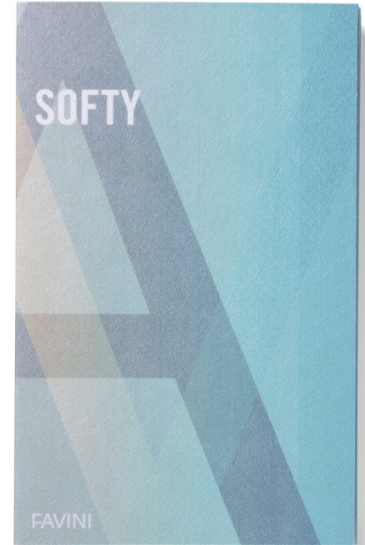


## SOFTY

### PRODUCT DESCRIPTION

A single sided tactile material that feels like cloth yet behaves like paper. Softy is extremely strong and reacts well to die-cutting and folding and, of course, print, making it ideal for packaging as well as other creative applications.

It is available 4 grammages. Certified FSC™.



### TECHNICAL DATA

#### THE FOLLOWING DATA REFER TO SOFTY WHITE

	METHOD		+/-	120	250	300	380
BASIC WEIGHT	ISO 536	g/m <sup>2</sup>	10%	148	263	303	383
CALIPER	ISO 534	µm	100	380	505	545	630
L&W STIFFNESS	ISO 2493	mN MD/CD	>	100/50 (15°/10mm)	60/30 (15°/50mm)	100/50 (15°/50mm)	200/100 (15°/50mm)

#### THE FOLLOWING DATA REFER TO SOFTY BLACK ON BLACK

	METHOD		+/-	120	300
BASIC WEIGHT	ISO 536	g/m <sup>2</sup>	10%	165	325
CALIPER	ISO 534	µm	100	415	600
L&W STIFFNESS	ISO 2493	mN MD/CD	>	150/75 (15°/10mm)	110/60 (15°/50mm)



RECYCLABLE



ELEMENTAL CHLORINE FREE



ACID



CARBON BLACK



REACH COMPLIANCE



HEAVY METAL COMPLIANT



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## PRINTING AND FINISHING RECOMMENDATIONS

### PRINTING JOB PREPARATION

Softy is produced to be stable between 40-60% humidity rate and at 21-23°C, therefore we advise to avoid exposure to extreme environmental conditions. Please keep the paper as long as possible in the original mill-packaging before use. This is particularly important for light weights.

Oxidizing inks for offset printing are recommended and UV drying inks for plastic.

### OFFSET PRINTING WITH OXIDISING INKS

#### PLATES

150 lpi engraved pattern.

#### PRINTING MACHINES

4 colours + 180 lines/cm station for varnishing - or to run a 5<sup>th</sup> black where needed.

#### INKS

Use oxidizing inks adding extra desiccant shared out among the 4 colours. For blacks, where a strong black is required, we recommend a second hit, using oxidizing ink at all times. Equally, it may be possible to achieve the depth of black by adding percentages of CYM with one hit of black, but it will depend on individual circumstances of the job and the print set up. Favini in Italy uses Huber inks (German brand) - Resista N9550, plus a desiccant called Grafo Dryer. In some jobs Favini has used 6% to 8% of desiccant, but it will depend on the job.

Favini and GF Smith have also run successful printing jobs using Sun Chemical Permafix oxidizing inks.

For an appropriate protection we suggest, when possible, to use an oxidizing varnish as 5<sup>th</sup> colour.

Obviously each printer has their own choice to make about inks and the above are not meant to be prescriptive, simply sharing our experience.

Because the materials absorb the ink, we recommend a higher intensity than might be anticipated, printing tests used up to 20% higher intensity than for a coated stock.

Extra note on Softy Black: we suggest to use silver and gold oxidizing inks.

#### FOUND SOLUTIONS

The absolute minimum water should be applied in the fountain solution. Favini / GF Smith printing jobs have used Prisco fountain solution which complements the choice of inks.

#### DRYING TIMES

The material dries like many uncoated papers, with up to 48 hours to dry and another 24 hours if creasing and folding is needed. Drying can be assisted with a drying section on the printing machine.

#### STACK HEIGHTS

In jobs with a high intensity of ink, we recommend a stack height of 10 to 12 cm.

#### OFFSET SPRAY POWDERS

We recommend the maximum possible, typically we have used sprays of 50 mic.

#### RUBBER BLANKET

Multipurpose compressible.

#### PRINTING PRESSURE

These types of supports need uncommon pressures to reach the maximum printing results, especially Softy that might be more difficult to treat since its thickness it's not the same of another paper of equal grammage.

#### OFFSET PRINT WITH UV INKS

We do not recommend UV inks for paper because they need a high temperature which is not compatible with the Softy surface. In case of very dark colours and deep black, offset UV with drying inks for plastic is suggested slowing down the machine speed in order to reduce the temperature and eventually to let the paper pass through the oven twice.

#### OTHER INDICATIONS

No printing technique with direct irradiation or with a heating unit at temperatures over 120°C should be used. It could burn the surface or cause deformation of the nonwoven fabric.

In case of Pantone colours and intense black it is recommended to use all four colours (CMYK) to obtain the required printing density or print twice the black.

Maximum pressures should be applied to obtain a good printing result with very intense graphic work (with heavy ink coverage). Paper has to be plentifully aired, always and only before going into the machine to make unstacking and descent on the table of the sheet catcher easier.

<b>DIGITAL AND LASER PRINTING</b>	Not guaranteed. The result depends on the graphic type and printing machine used. We suggest to test the product in advance.
<b>INK-JET PRINTING</b>	Not guaranteed.
<b>SCREEN PRINTING</b>	We suggest to use solvent based inks and eventually test the product with this technique. UV inks are not suitable. Test different screens with values from 21/140 to 61/64. Problems related to different adhesion across the sheet are possible with transparent varnish.
<b>INKS</b>	Use vinyl or nylontech inks. Do not exceed 80°C. The printed sheets must not be stacked before 2-4hrs of drying in the set locations if available or before 24 hours in mini stacks. Ink with metallic pigments (glitter) give a good result.
<b>RUBBER BLADE</b>	Recommended hardness 60-70 shore.
<b>FOIL PRINTING</b>	This technique requires special care since it is necessary to slow down machine speed, prolong printing times and increase cliché pressure. Not all foil types are ideal for this material, we suggest to test the different foils beforehand. In particular, the underlying material can have an interference on the outcome of the foil - for example a silver foil may come out aluminium like, i.e. satinated rather than bright and shiny. Good results have been achieved with Foil Co, Manetti AB43, ITW Foil OSP100 foils for example, but also others have worked extremely well - it will once more be a question of fitting the right material to the demands of the job.  Extra note on Softy Black: using the technique of hot foil, but avoiding the foil, an unusual effect can be achieved. In fact the areas in contact with the cliché melts the nonwoven textile giving a different surface feeling. This technique can be observed in our NERO booklet which you can request via web under the section samples & swatches of the web site <a href="http://www.favini.com">www.favini.com</a> .
<b>CUTTING AND DIE-CUTTING</b>	Below 200, the use of a die cutter is suggested for a higher cutting precision. For guillotine, use no more than a 100 sheets/stack each time. With substances over 200, the guillotine can be used directly but always with small paper stacks.
<b>LASER CUTTING AND ENGRAVING</b>	Softy is suitable for both laser cutting than engraving. White turns to yellows in the areas treated by the laser.
<b>GLUING/LAMINATION</b>	In case of shoppers, envelopes... we suggest to use polyurethane based glues for plastic applications. For bookbinding and covering boxes application use vinyl based glues or hot melt.
<b>PUNCHING, FOLDING, CREASING</b>	Softy has excellent properties for these techniques.
<b>EMBOSSING</b>	We suggest to try the product, in fact the result depends on combinations between product finishing, colour and embossing pattern.

> Please contact our technical department for further suggestions.

## MILL ACCREDITATION | Crusinallo VB - Italy

CORPORATE QUALITY MANAGEMENT STANDARD | UNI EN ISO 9001

ENVIRONMENTAL MANAGEMENT STANDARD | UNI EN ISO 14001

OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT STANDARD | UNI EN ISO 45001

ECO-MANAGEMENT AND AUDIT SCHEME CE 1221/2009 | EMAS

We care about the environment: [www.favini.com/en/sustainability](http://www.favini.com/en/sustainability)