TECHNICAL GUIDE

SUPERYUPO+

YUPO

PRINTING RECOMMENDATIONS

1. Let SuperYUPO$^+$ acclimatise for at least 24 hours before unpacking it. It should be left to acclimatise for a longer period during the winter.

2. The ideal printing room conditions are relative air humidity: 50-60%, temperature: 20-25°C.

   Feeder: Use the settings for normal print paper.

   Delivery: Here it is important for the sheets to fall softly on top of the stack and not hit the sides as it may cause creasing. Turn it off if necessary and decrease the compressed air.

3. When printing on SuperYUPO$^+$, the dot gain will increase by 10% over that of print paper. Please plan for this before it goes to press or for plate imaging.

4. It is possible to use conventional paper ink on SuperYUPO$^+$. To increase scratch resistance you can also print with foil inks. **UV Offset printing is not recommended.** Please use SuperYupo. When using special colours, it is important to make sure they are colour- and alkali-fast. Otherwise the ink might bleed out, especially in combination with dispersion varnish.

NO SPECIAL CONVENTIONAL OFFSET PRINTING INKS ARE REQUIRED.

RECOMMENDED DENSITIES ON SUPERYUPO$^+$ ARE: K:1.75 C:1.45 M:1.35 Y:1.00

5. Dampening agents should be used sparingly. As the SuperYUPO$^+$ surface cannot absorb dampening water, an excessive supply of moisture will cause the dampening water to build up on the printed sheet, which will progressively disrupt ink acceptance or adversely affect the drying process after printing. We therefore recommend reducing dampening in all units to such a degree that the print begins to scum/smear. Then gradually increase the dampening again until the “blotches/ smears” disappear. Ink acceptance may be disrupted in the magenta printout, for example, even though there is minimal dampening on the magenta printing plate. Here it is important to check the dampening in the prior printouts (black and cyan) as dampening agents may accumulate on the printing sheet and the effects will only be seen in subsequent printouts. Observe the following: The more surface that is covered by each individual colour on the printing sheet, the easier it is to regulate the ink-to-water balance. When smaller areas are covered, an ink strip may remedy the situation.

6. For the best results with SuperYUPO$^+$, increase the surface pressure by 10 to 20%.

7. Increase the washing intervals when working with SuperYUPO$^+$. We recommend washing rubber blankets after approximately every 5,000 sheets.

8. We recommend using dispersion or overprint varnish to increase scratch resistance. When printing with dispersion varnish, it is important to ensure the varnish dries directly after removal from the printing machine. Repositioning the printed pallets later also helps to prevent possible sticking.

9. High stacks of SuperYUPO$^+$ are not recommended. Please do not stack more than 10cm of printed sheets in the delivery.

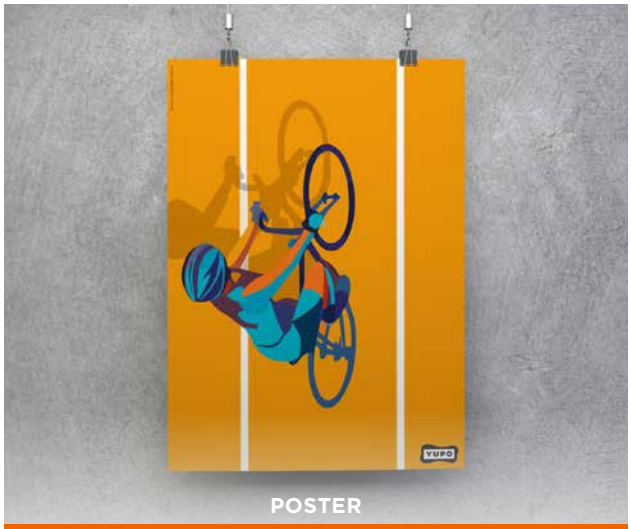
10 .When using anti-set-off spray powder, your experience with coated print papers can serve as a guide. The particle sizes should be 15-25 µm.

11. Average dry time of SuperYUPO$^+$for conventional offset printing with conventional paper ink:

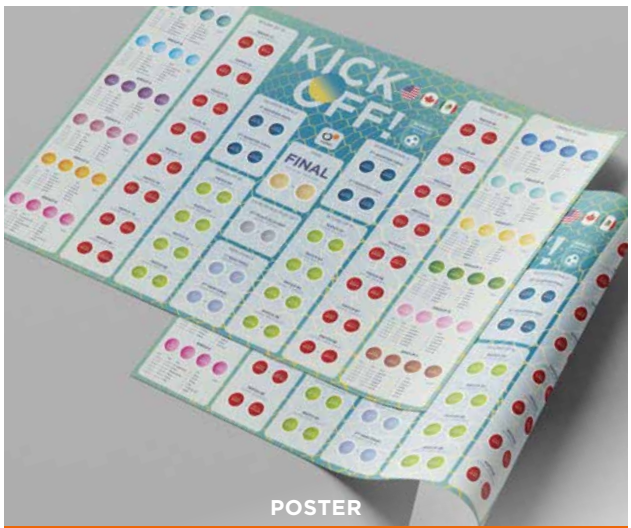
    100% ink coverage within 2 h
    200% ink coverage within 3 h
    300% ink coverage within 4 h
    It is not recommended to exceed an ink coverage of 280%!

    The drying times given were calculated based on careful analysis of results from tests performed by YUPO Europe. As there may be differences in print results and drying times caused by the ink type and printing conditions, please test the printing quality before printing a stack.

12. In order to prevent a ghosting effect, it is important to ventilate the stack within two days in order to remove any off-gassing resulting from the drying process.



POSTER
SUPERYUPO$^+$ FRBW 250



POSTER
SUPERYUPO$^+$ FRBW 130

FURTHER PROCESSING

All adhesives, designs, laminating materials, and binding processes should be tested in advance to ensure compatibility with SuperYUPO+ prior to the production run.

CREASING
Creasing should always run parallel to the grain direction of SuperYUPO+. When producing folded pamphlets or maps, the grain direction should run parallel to the side with the most folds. To prevent reopening, creased products should be secured by weighting or bundling.

STRING AND WIRE BINDING
There should be no free space between the individual folds. The grain direction of YUPO must be taken into consideration.

ADHESIVE BINDING
We recommend using a PUR (polyurethane) or hot melt adhesive (with an EVA – ethylene vinyl acetate base). Use an additional hardener and reduce the adhesive amount. It is only advisable to use cold adhesives when YUPO is combined with absorbent materials. Longer drying times should be expected.

ADHESIVE FOLDS
The grain direction of YUPO must be taken into consideration. The adhesive must be tested in advance.

HOLE PUNCHING
Stacks between 2 and 3cm are recommended. Only use sharp drills!

PUNCHING AND PERFORATING
Punching tools should always be sharp and free of notches. In order to prevent the formation of notches and corners (that could cause tears), the inner corners must be rounded. Take this into account when designing punch dies. Punch die stopping points should be mounted in the grain direction whenever possible in order to prevent tears when it breaks away during later usage. Perforations should always start with a cut on the outer edge of the material and continue in the grain direction.

SPIRAL BINDING
To minimize the risk of tearing, all punched holes should be circular.

STAMPING
Do not use sharp stamping tools. Stamping pressure should amount to 100-200 kg/cm. The temperature of the stamping roller should be between 60 and 80°C.

FOIL STAMPING
Avoid high temperatures as this may cause the material to deform. Ask your supplier about suitable film.

HOT SEALING
Before the seal is placed, one side of YUPO should be coated or laminated with LDPE (low density polyethylene).

NOTES

LASER PRINTING
Please consult YUPO for guidance on selecting appropriate materials for laser printing with dry toner systems.

PHYSICALLY DRYING OFFSET INKS
Even though SuperYUPO+ is a synthetic material, it is possible to use conventional paper inks due to a special surface treatment. To increase the scratch resistance, it is recommended to use oxidative drying inks and apply to an overprint varnish (dispersion varnish recommended). However, it is necessary to process a printed pallet within one week as off-gassing from the solvents may cause a ghosting effect. Regular ventilation of the pallet is also recommended.

GRAIN DIRECTION
The grain direction of YUPO is clearly visible on the label. It is always given parallel to the first length information mentioned. When YUPO tears, the tear will also run straight in the grain direction. Tears perpendicular to the grain direction are easily detectable by sound and do not propagate linearly.

STATIC CHARGE
YUPO has a special antistatic treatment applied on its surface. Problems associated with electric charges are rarely seen when printing on YUPO. Optimal conditions should be maintained in the printing room all the same (20-25°C, 50-65% RH). YUPO should have at least 24 hours to acclimatise before printing and should be unpacked no more than one hour before printing commences. Static charge may be higher in winter as the temperatures and relative humidity are low. In such cases, an antistatic spray or antistatic strip can be used to reduce the static charge.

TENDENCY TO DUST
YUPO may have an increased tendency to dust as the inorganic fillers may come out under pressure and be visible on the rubber blanket. Countermeasures: Position the extractor and roll on the feeder so that they are outside of the print layout. Adhere material to the extractor on the feeder. Use the first printing unit to “de-dust” the material (Caution! This could result in increased static charge).

HEAT RESISTANCE
YUPO shrinks when heated. We recommend using YUPO at temperatures between -40°C and 80°C. YUPO is capable of withstanding higher temperatures for a short period of time (e.g. during the printing process). The melting point of YUPO is approximately 160°C.

TEAR RESISTANCE

YUPO is highly resistant to tear propagation and is rather durable. However, when the surface is damaged (notch) YUPO will tear very easily. For this reason, all machines used for cutting, hole punching or punching must be sharp and free of notches.

WEATHER RESISTANCE

We guarantee the durability of our outdoor products for at least one year, even when subjected to strong UV rays. However, we do not guarantee the durability of the printed image. For outdoor use, please use inks with high lightfastness.

SHELF LIFE

The characteristics of the surface of YUPO change after a certain period of time. It can be stored for up to one year without changing its properties. Materials for offset printing generally last much longer and can be printed without a problem after being stored for a few years.

SUPERYUPO^{+} – EXTREMELY DURABLE AND EASY TO PRINT ON

SuperYUPO^{+} is the latest product in the YUPO Corporation's conventional printing line. It is the first YUPO material that can be printed on both sides with paper inks. Bid farewell to the hassle of changing inks or reconfiguring the machine for synthetic materials. This outstanding printing medium is quick-drying and tear-resistant, with a silky smooth surface.

Continuing the commitment that Yupo Corporation has with the protection and care for the environment, we are proud to promote that our SUPER YUPO^{+} contains up to **40% mineral content**, depending on the thickness of the grade, and being a PP based material.

VERSION SUPERYUPO^{+}	THICKNESS µm	GRAMMAGE g/m^2	ROLLS mm × m	CORE mm	SHEETS mm × mm	UNIT per ream	PRINT METHODS
FRBW 110	110	88,7	on request		640 × 450 1020 × 720	250	conventional offset
FRBW 150	150	115,5	on request		640 × 450 1020 × 720	250	conventional offset
FRBW 200	200	158,0	on request		640 × 450 1020 × 720	125	conventional offset
FRBW 250	250	200,0	on request		640 × 450 1020 × 720	125	conventional offset
FRBW 300	300	234,0	on request		640 × 450 1020 × 720	125	conventional offset

Unless otherwise stated, the grain direction is parallel to the first dimension.

PRINTED ON **YUPO**BLUE YPI 250, 2026

YUPO Europe GmbH
SCHIESSSTRASSE 47 | 40549 DÜSSELDORF
TEL. +49 211-520 54 30 | WWW.YUPO.EU

Treasuring the earth