

SPECIFICATIONS

In the absence of specifications or customer requirements clearly expressed and contractually validated by both parties, the technical data set out below will constitute the technical references regarding the acceptance or rejection of the delivered products.

SUMMARY

- File / prepress
- Inks & varnish Alimentary
Light fastness
Colorimetry
Color tracking
Keeping inks
scotch test Finishes: drying varnish,
holding laminating,
gilding and serigraphy
- Cutout
- Joining
- Packaging & Expedition
- Quantity tolerances
- Controls
- Traceability
- Test



FILE: Prepress

Given the constraints of photogravure related to continuous printing, the files provided must comply with our specifications.

Otherwise, our compliance file will be billed according to our pre-press service tariff and the shipping time of the labels, will depend on the date of final validation of the BAT.

Our standard print for the quad is ISO COATED V2 39L.

Our standard print for Pantones also called spot colors is the color chart in its electronic version. If it is required to reproduce a competing model, the file provided must allow the model received to be printed identically. For this we print an ISO COATED V2 39L proof of the file and we check it against the received model. Otherwise, we will ask you for a new file or we will put it in colorimetric conformity (if it is possible) via a service that will be invoiced.

1.1 IN ALL CASES

Clearly indicate the cutting format (width x advance).

Put the shape of cut on a separation "Découpe" in superimposition

Indicate Pantone colors or desired color references.

pantone colors can be translated into hexachromics (digital printing)

Clearly define white areas
or partial varnish.

Join validated color targets before BAT
processing.

1.2 FILE PROCESSING

Texts and fillets

Minimum font size	1 positive color	4 pt	positive multicolors	10 pt
	1 negative color	5 pt	negative multicolors	10 pt



Font size for the INCO standard: minimum 6.5 body
(the minimum height of "x" (lowercase) is 1.2 mm)

Thickness of the fillets minimum	1 positive color	0,1 mm	positive multicolors	0,3 mm
	1 negative color	0,15mm	negative multicolors	0,3 mm

Bleed off and trapping

Bleed of 3mm around the cut.

Text security and spinning

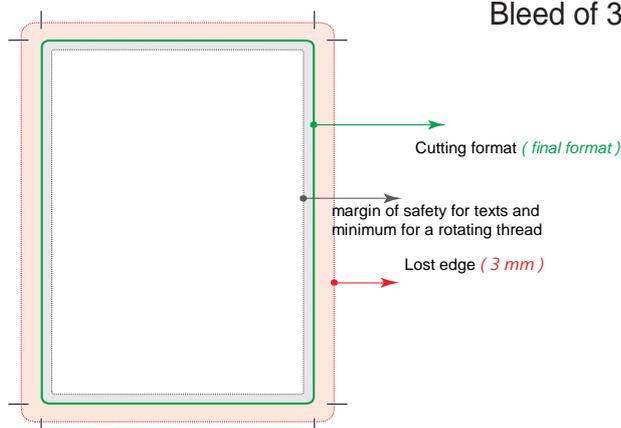
net:

margin of 1.5 to 2 mm minimum
inside the cutout.

Trapping
(color tracking)
0.15 mm

Bar code (EAN13)

size from 80% to 200%
bar width reduction 0.04 mm





For coupons/multipages indicate with an arrow or other indication the position of the opening tab.

For retractable sleeves, onserts, multiple multipage, existing special shapes, request a layout plan on which you can mount your files.

	Lineature	Maximum ink rate	Fatter/ thinner	Note
WATER FLEXT (traits/coupons)	133	300%	0,2 mm	Pt mini 2% (imp 6%)
FLEXT HD	175	280%	0,15 mm	Profil ISO COATED V2 39L**
OFFSET - IML	199	240%	0,05 mm	Profil ISO COATED V2 39L**
DIGITAL	175	300%	0 mm	Profil ISO COATED V2 39L

** Solid light non-ISO printing, ask us a proof

1.3 FILES TO BE PROVIDED

File types: PDF (1.6) HD only (1 file by label)

Images if need retouching: mini resolution 300 to 400 dpi (provide PSD, without color profiles).

No logo or text should be processed in Photoshop (except the headlines).

FOCUS ON ELEMENTS VECTOR.

NO RGB IMAGES.



Note: The final rendering will correspond to the quality of the file provided: a large format label with a low resolution will give a disappointing result.

INKS & VARNISH

2.1 ALIMENTARITY

It is the customer's responsibility to clearly indicate the use of our products for the purpose of packaging foodstuffs in order to enable us to perform our duty of advice to the best of our ability.

As a reminder, European legislation (CE10 / 2011, CE1935 / 2004 and EN 71-3) requires that migration analyzes be carried out on all packaging containing foodstuffs. This is to check that the potential migrations in foodstuffs of chemicals from these packaging do not exceed the authorized thresholds, and to be able to certify their regulatory compliance. These analyzes are the responsibility of the companies that market the finished products, those that will be sold to end customers. In no case can the printers carry out these analyzes because they cannot be guarantors of the control of the final packaging in their totalities nor control their uses. On the other hand, they have a duty of advice to their customers (especially via this specification) and can be proactive by advising the most suitable inks and varnishes so that these migration tests can be compliant.

2.2 LIGHTNESS

It is the client's responsibility to clearly indicate the need to use solid inks (magenta and yellow for quadri in particular) and to specify the conditions of exposure of the labels and their life span. Recommendations according to the regulations applicable to the labeled product (toy standard, "agri-food" standard, UV and chemical exposure conditions): see OPE G P2 - 6 in the appendix

Ladder of wool	Practical evaluation	Indicative duration of exposure under an average central European sun	Indicative duration of exposure in a SolarBox*	Light fastness
1	Very weak	1/2 days	1 H	Bad
2	Weak	4/7days	4 H	
3	Average	2 weeks	10 H	
4	Good enough	1 month	20 H	
5	Good	2/3 months	50 H	Intermediate**
6	Very good	3/6 months	100 H	
7	Excellent	7/12 months	200 H	Excellent
8	Maximum	2 years	500 H	

*Table of correspondence between the wool scale and the exposure time in our SolarBox 1500W set as follows: potentiometer position 8 (= irradiance of 700 W / m from 300 to 800 nm) with glass filter (neutral).

**As an indication, this level of light solidity corresponds to the CDC of L'Oréal which requires a light fastness of 24H minimum in SolarBox.

To determine the light fastness level of an ink, a sample is exposed in our SolarBox according to the durations indicated in the table above. For each level of exposure shown in this table we control that the color variation between the exposed sample and the original sample does not exceed $\Delta E_{00} > 3$. When this is the case, the light fastness of an ink is between the quotation of the wool scale which has a $\Delta E_{00} > 3$ and that just before that has a $\Delta E_{00} < 3$.

For example 5-6.

Here is for information the level of light fastness of the standard inks (nonspecific solid light) according to their colors:

- 7-8 black, blue, green
- 5-6 orange, yellow and red rare
- 2-4 red, magenta, violet, purple

2.3 COLORIMETRY

For solid colors, the color deviations measured with the spectropolarimeter must not exceed a tolerance of 3 of DeltaE formula 2000 ($\Delta E_{00} < 3$).

For backing spots, the contrast value must be greater than 65% (not applicable for numbering). This value is measured on the backing (unlabeled) on a standard white and black card with a spectropolarimeter. INS P3-75 rev 1.

Stratus Packaging reserves the right to improve the color rendering of the prints compared to the previous printings as this evolution allows to get even closer to the initial target which is the ISO 39L for the four-color process and the electronic reference system for Pantones shades. for Pantone tones (ΔE_{00} maximum 3).

Of course, the exceptions are made if customer targets are provided and/or specific requests are stated by our customers especially at the time of the BAT.

In the case of customer target for non-standard ISO 39L four-color process, file modifications will be required in order to match the output of the ISO 39L test of the file with the target client.

The purpose of this clause is to allow the Stratus Packaging Group to freely develop its equipment and the control of its manufacturing process within a framework limited to an improvement of the print quality compared to the colorimetric standards of the profession of graphic industries.

2.4 IDENTIFICATION OF COLORS

The color registration tolerance between them is fixed at: +/- 0.2 mm.

2.5 KEEPING INKS-SCOTCH TEST

Applicable only to synthetic and non-metallised material (not applicable to digital coating)

The resistance of the inks to the surface of the printed material will be tested with adhesive tape as described below:

Ref tape : 3M 683

- application of a tape of 100 mm (approximately)
- application of one (and only one) constant but not excessive pressure, with the finger, so as to expel the air under the tape and to penetrate the adhesive
- tearing off the tape

By default, no waiting time will be applied before tearing off the tape. The results obtained are ranked on a scale of 0 to 5:

- 5/5 = no tearing of the ink
- 4/5 = tearing off some isolated micro dots
- 3/5 = tearing of small sections of a few mm²
- 2/5 = tearing flat sections of a few mm² to a few cm²
- 1/5 = tearing of ink strips in several cm² flat areas
- 0/5 = complete tearing (well differentiate a tearing of a disintegration of the layers of the material)

At the end of the test, the result should be 5/5 or 4/5 for the test to be compliant.

2.6 FINISHES

2.6.1 DRYING OF REVERSIBLE VARNISH

The control of drying and transferability is performed on a printer equipped with a flat head having a speed greater than 120 mm / s.

The thermal transfer ribbon is APR5 or APR600 from ARMOR.

2.6.2 HOLDING OF LAMINATION GILDING AND SCREEN

The holding is consistent if no tearing is found with the adhesive tape 810 3M. The adhesive tape is positioned on the label (without exceeding the format of the label and therefore without straddling the cutout) and removed immediately.

CUTTING

Tolerance of the marking of the cut with respect to printing: +/- 1,5 mm

JOINING

4.1 STANDARD LABELS

The joining is defined according to 2 parameters:

- Release: This corresponds to the low speed anti-adhesion (delamination) force, defined as the force required to separate a self-adhesive material from its support or protector (or vice versa) at an angle of 180° and at a separation rate of 300 mm / minute. This parameter is controlled according to the FINAT FTM3 standard.
- The anti-adhesion force (delamination) at low speed is expressed in centinewton per 50 mm width. The target is a "min / max" range defined on the STRATUS vendor data sheet.
- Adhesive weight: The adhesive deposit here is the adhesive weight on a standard surface, expressed in grams per square meter. The target is a "min / max" range defined on the STRATUS vendor data sheet.

4.2 FUGITIVE GLUE LABELS (MULTIPAGES)

The low speed delaminating force is defined as the force required to separate the first part of the label. Breaking load (gf) between 100 and 220 gf (gram force, 1 gf = 9.806 65 Mn).

The label is designed for a conformal adhesion on a round support with a diameter of 40 mm.

4.3 "SLEEVES" (HEAT SHRINK SLEEVES)

The adhesion of the weld is expressed in centi newton: the value must be between 50 and 200 cN.

An additional test using a STEAMBOX allows to qualify the resistance of the weld.

PACKAGING & SHIPPING

Slope tolerance (distance from the backing edge to the edge of the label) on a standard label is +/- 0.5 mm

Slope tolerance (distance between the edge of the backing and the edge of the label) on an onsert label is

+/- 1 mm Chuck diameter tolerance: +/- 0.5 mm

The label reels are placed in cartons or box pallets if the volume permits.

In case of pallet box: the coils are placed in layer if only one reference or in columns if we are in multi-references (with separation by cardboard dividers).

The labels will be delivered by "standard" carrier; refrigerated transport possible.

In case of specific wish of the tightening of the coils (very strong or loose) the information will have to be communicated to us in a specification.

TOLERANCE OF QUANTITIES

In relation to the quantities ordered, the tolerances accepted for delivery are limited, for each reference, to the following percentages:

- +/- 15% for orders less than or equal to 10,000 labels
- +/- 10% for orders between 10,000 and 25,000 labels
- +/- 7,5% for orders between 25,000 and 100,000 labels
- +/- 5% for orders over 100,000 labels

In the case of a skins order: the customer must indicate this information on his purchase order; The quantity will be imperative and identical between each element of the dressing.

CONTROLS

The controls described above will be recorded and will be performed for each printed reel. A claim will only be accepted if it is declared within 12 months of receiving the labels.

TRACEABILITY

A traceability label will be pasted on each reel or package:

- the date
- the production order number (OF)
- STRATUS label code
- the customer label code (if required)
- quantity of labels contained in the coil
- the codes of the operators having intervened on this OF

GUARANTEES & RECOMMENDATION

The guarantee of the labels is 12 months after shipment, whatever the defect, and provided that they are stored:

- protected from light (especially UV light) and dust
- in temperature conditions between 10 and 20 °C
- under standard humidity conditions (50% RH)

TESTS

The tests are not printed by default and are mandatory when creating a range on the following products: inserts, sleeves

Our service Methods allows itself the right to require a test for any other product with specific features.

	CLIENT	STRATUS PACKAGING
Name		
Function		
Signature		

Without a response from the STRATUS PACKAGING customer, this specification will be considered accepted.