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| QUALITY ASSURANCE | SUPPLIER SPECIFICATIONS |  | IML |
| SUPPLY OF « I.M.L. » CAST PP FILMS FOR PRINTING ON ROTARY MACHINES OR SHEET FED | | Identification : 1/7 | Updated Feb.1 st - 2011 |

EUROPEAN CUSTOMERS

| <u>"PROPYPLAST" SUPPLIER</u> | <u>CUSTOMER:</u> |
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| <u>Approved by :</u> G.LAURENT | <u>Approved by :</u> |
| <u>Function :</u> Quality/R&D Responsible | <u>Function :</u> |
| <u>Date :</u> February, 1 st - 2011 | <u>Date :</u> |
| <u>Signature :</u> | <u>Signature :</u> |

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| <p>QUALITY ASSURANCE</p> | <p>SUPPLIER SPECIFICATIONS</p> |  | <p>IML</p> |
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1. FIELD OF APPLICATION

The following specifications apply to the « IML » cast PP films supplied by PROPYPLAST :

- LMG® C LMG® W12
- LMG® C DIG LMG® W DIG
- LME C LME W
- SPC SC C SPC SC W
- SPC MSA SPC MSB

Application : « in mould labelling ».

These specifications concern :

- a)- the use of our film in reels on rotary printing machines (equipped with «FIFE » system and with an on-line Corona treatment station)
- b)- the use in a « sheet-fed » printing machine (equipped with Corona treatment)

The inks must be suitable for the polypropylene film printing.

2. CHARACTERISTICS OF THE POLYPROPYLENE FILM

2.1. Thickness :

Thickness tolerances : nominal thickness +/- 5%

2.2. Weight :

| | |
|---|---|
| « LMG® C 82 » : 73.9 gr/m ² (+ / - 5%) | « LMG® W12 82 » : 77.6 gr/m ² (+ / - 5%) |
| « LMG® C DIG 82 » : 73.9 gr/m ² (+ / - 5%) | « LMG® W DIG 82 » : 77.6 gr/m ² (+ / - 5%) |
| « LME C 75 » : 67.6 gr/m ² (+ / - 5%) | « LME W 75 » : 70.2 gr/m ² (+ / - 5%) |
| « LMG® C 100 » : 90.2 gr/m ² (+ / - 5%) | « LMG® W12 100 » : 94.7 gr/m ² (+ / - 5%) |
| « LMG® C DIG 100 » : 90.2 gr/m ² (+ / - 5%) | « LMG® W DIG 100 » : 94.7 gr/m ² (+ / - 5%) |
| « SPC SC C 60 » : 54.1 gr/m ² (+ / - 5%) | « SPC SC W 60 » : 56.8 gr/m ² (+ / - 5%) |
| « SPC MSA 150 » : 137.7 gr/m ² (+ / - 5%) | « SPC MSB 150 » : 141.1 gr/m ² (+ / - 5%) |

2.3. Appearance of film :

The film must not contain foreign bodies, perforations (holes, film breaks), scratches leading to a break in the continuity of the Corona treatment, soiling.No blocking (welding) on the reels.

2.4. Mechanical properties :

Refer to the product data sheets

2.5. Printability :

The « IML » film have only one printable side (this side is marked with a red label)

An on-line Corona treatment is carried out in order to produce a printable film.

This treatment is checked after the extrusion and its value is minimum 48 dynes/cm.

This Corona treatment is not guaranteed on a long term basis and varies depending on the storage conditions.

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For this reason, and before any use, the level of the Corona treatment on the printable side must be checked by the user.

When « reverse printing » is used, PROPYPLAST's films are not guaranteed for « in-mould labelling ». For this application, the printer has the responsibility to check that the printing will not disturb the welding of the label during injection. The printer must also contact PROPYPLAST in order to determine which film could be used.

2.6. Coupling joints :

Joints are made with a coloured adhesive tape (minimum 5 cm wide)

These joints have the following characteristics :

- no extra thickness (to avoid any blanket damage)
- reels with a diameter of 785 mm might have 2 connections maximum

2.7. Running meters per reel :

| | | | | |
|---------------|----------------|----------|-------------|-------------|
| LMG® C 82 | LMG® C 100 | LME C 75 | SPC SC 60 | SPC MSA 150 |
| LMG® W12 82 | LMG® W12 100 | LME W 75 | SPC SC W 60 | SPC MSB 150 |
| LMG® C DIG 82 | LMG® C DIG 100 | | | |
| LMG® W DIG 82 | LMG® W DIG 100 | | | |
| 5330 ml | 4450 ml | 5900 ml | 7100 ml | 3000 ml |

2.8. Electrostatic charging :

The electric charge of the reel (measured during unwinding) is ≤ 5 kV/m

3. REEL PACKAGING

3.1. Dimension of the reels :

- Width : tolerance +1 mm – 2 mm
- Length of core : width +/- 1 mm
- Internal core diameter: 152 mm (6'') External core diameter: 175 mm
internal core diameter : 76 mm (3'') is possible for LMG® C DIG and LMG® W DIG

3.2. Edges :

Edge flatness: width +/- 2 mm.

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4. IDENTIFICATION

4.1. Reel :

Each reel has 2 types of label :

A- Identification label:

- 1 inside the core
- 1 on the reel itself

Here below the informations on the labels:

- Reel number
- Extrusion date
- Product reference
- Thickness
- Width
- Running meters
- Customer's order number
- Customer's article number
- Propyplast's order number


Here below a standard reel label :

| |
|--|
| BOBINE : QUALITE : EPAISSEUR : LAIZE : CDE : AR : N° CODE : FACE IMPRIMABLE : QUANTITE : DATE : |
|--|

B- Label indicating the printable side:

Here below a standard label (red colour)

| |
|--|
| PRINTABLE SIDE BEDRUCKBARE SETTE FACE IMPRIMABLE CARA IMPRIMIBILE YAZILAN YAN |
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4.2. Pallet :


Each pallet is identified with a label (on each side of the pallet).

This label, sticked on the right top of the pallet, contains :

- Product reference
- thickness
- pallet number
- number of reels
- extrusion date
- width
- total running meters
- Customer's order number
- Propyplast's order number

Here after a standard pallet label

| | | | |
|--|--|--|----------------|
| DOCF033 | | | |
| <p>FICHE D'IDENTIFICATION</p> <p>N° COMMANDE :</p> <p>N° AR :</p> <p>REFERENCE :</p> <p>QUALITE :</p> <p>Epaisseur (microns) :</p> <p>Largeur (mm) :</p> <p>Face imprimable :</p> <p>Quantité :</p> <p>N° palette :</p> <p>Nombre de bobines :</p> <p>Date de fabrication :</p> | | | |
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5- PALLETIZATION

- 1 reel per pallet
- wood endplates 800 x 800 mm + plastics cups ref. EMB-COU-01213
- 2 pallets wrapped together (one pallet on the top of the other)

Pallet 800 x 1200 mm : « EUROPALLET » type

The reels are packed on wood endplates with plastic cups.

The pallet is wrapped with transparent film in order to enable the inspection at reception.

The palletization depends on the size of the reels. The maximum height of the pallets is 1.95 m