

Saraswaty Press Limited, a Government of West Bengal Enterprise invites sealed offer only from Actual Manufacturers for supply of LDPE film of thickness 55/60/65 micron. The LDPE film must be suitable for sealing & filling of food grade Liquids, i.e, water, milk, cooking oil, alcohol, etc. in high speed automatic sealing and filling line. The material will be needed in reel of approx. 81 CM /101 CM width.

Eligibility criteria for participation:

Technical Bid criteria:

- i. The bidder must have been manufacturing LDPE & similar films for pouch making at least for two (2) financial years (i.e. 2018-2019 and 2019-2020).
- ii. A Bidder shall have an average minimum Net worth of Rs. 1 Crores in two (2) financial years (i.e. 2017-2018 and 2018-2019).
- iii. A bidder shall have minimum average annual turnover of Rs. 10 Crores for the two financial years (i.e. 2017-2018 and 2018-2019).

The bidder shall have to furnish the following documents to meet the eligibility criteria:

- i. Copy of Trade License,
- ii. Copy of PAN Card,
- iii. Copy of GST Registration Certificate.
- iv. Audited Balance Sheet for the 2 (two) financial years (2017-2018 and 2018-2019).
- v. Documents in support of manufacturing LDPE & similar films for pouch making at least for two (2) financial years (i.e. 2018-2019 and 2019-2020).
- vi. Details of list of equipment
- vii. Certificate from NABL/CIPET certified laboratory for Food Grade quality of the LDPE film.
- viii. Four sample sheets in A3 size

Price Bid:

Rate should be quoted for Per Kg excluding applicable GST for transparent as well as white films. Rate should be valid for 12 months from the date of opening the tender

Due to COVID-19 protocol online Pre-bid meeting will be held on 16/11/2020 on 15:00 hrs through email communication only. Interested parties are requested to send queries through email 2 hours before the pre-bid meeting at splbel@saraswatypress.com.

Interested actual manufacturers may send their sealed Offer in two separate parts Technical Bid and Price bid on 24/11/2020 within 2 p.m. to the Purchase Committee, Saraswaty Press Limited, 11, B.T.Road. Kolkata- 700056 & will be opened on the same day. The company reserves the right to accept, negotiate or reject any or all offer with any vendor at its own discretion.

SPECIFICATIONS OF LDPE POUCH FILM

1. COMPOSITION:

The film shall be made from virgin polyethylene LDPE/LLDPE (1005FY20 and O19010/Octane) Food grade quality given in IS:10146- 1982 and IS:10141-2001. The film may be co-extruded using above material and the pigments used @ 2% shall be from those listed in IS:9833-1981. The film shall have DART IMPACT RESISTANCE minimum of 180 gf for 60 microns, when tested as per A-6 of IS 2508, 1084 at drop height of 66 cms.

2. APPEARANCE:

The film shall be uniform in texture and finish and it shall be clear and transparent, free from pin holes, streaks, particles of foreign matter, gauge variation bends and un-dispersed raw material. There shall be no other visible defect such as holes, tears or blisters. The film shall have even and wrinkle free surface.

3. SPECIFICATIONS:

- a) The film shall be supplied in rolls.
- b) Core should be strong and made from properly compressed paper having smooth surface with the identification marks of the company stamped/printed on it. Inner diameter of the core 70mm and Weight of the core (max) 600 grams (as an average of 25 cores).
- c) Film Thickness: 55/60/65 microns (tolerance 5%).
- d) TENSILE STRENGTH: the tensile strength at break when tested as prescribed in A-4 of IS: 2508-1984 for polyethylene films shall be as follows:

For 60 Microns (Length wise %) Minimum 210 kg.f / Sq.cm (Cross wise %)
Minimum 190 kg.f / Sq.cm Page
- e) Elongation at Break: The elongation at break when tested as prescribed in A-4 of IS:2508-1984 for various thicknesses of polyethylene film shall not be less than the following values
- f) THICKNESS OF FILM ELONGATION AT BREAK, (MINIMUM) LENGTHWISE CROSSWISE (PERCENT) (PERCENT) 60 Microns 220 500
- g) DART IMPACT resistance: The impact failure load of polyethylene film shall be tested by the procedure given in A-6 of IS: 2508-1984 obtained from a drop height of 66 cms. For 60 micron- minimum 180 to 195gf

- h) Width: The width of the film shall be 810 mm/1010mm ± 2 mm. No minus tolerance is allowed.
- i) Odour: The film shall be free from any extraneous odor.
- j) SLIP: The kinetic coefficient of friction for film when tested in accordance with A7 of IS:2508-1984 shall not be greater than 0.2.
- k) SEALING PROPERTY: The film shall have good sealing property for vertical and horizontal sealing. Opacity (% of light transmission) < 30%

4. WINDING:

The film shall be winded on the core uniformly and with proper tension giving perfect and trimmed edges. There shall be no telescoping of film layers. The core shall be strong enough so as not to collapse in use. The film should be free from cut pieces, joints and insects etc.

5. Construction:

The pouches shall be formed, filled and sealed on the form, fill and sealing machine, leaving adequate head space in the pouch for filling and sealing operation. The width and length of the pouch shall be according to the dimensions of forming and sealing system. The variation in the width and the length of the flat pouch shall not be more than ± 3 mm of the mean dimension.

6. Printing:

The film shall be printable and must have surface treatment of 50 dynes. The film must sustain surface temperature of 70 deg. (8% tolerance) Centigrade for heat transfer security printing.

7. Packing :

- i. **Packing:** The rolls shall be wrapped in polyethylene sheet.
- ii. **Marking:** The following information should be marked legibly on each roll of the film supplied.
 - a. Name, Type and Thickness of the film.
 - b. Name and Address of the Manufacturer.
 - c. Net and Gross weight.
 - d. Serial No. and Date of Manufacture.
 - e. Place to which the rolls are supplied.
 - f. Packing slips should be affixed inside the core with all the weights including the empty core weight.

8. Sampling:

The sampling method adopt for testing the polyethylene film shall be as per

9. Method of inspection and testing:

- a) Immediately on receipt of co- extruded pouch film 10% of the rolls received will be weighed at random and if the weight noted on the packing tallies positively, with the weight observed, the total quantity as noted in the delivery challan will be acknowledged. If the actual weight of the 10% rolls is less than the notified weight on the packing, proportionate deduction based on average weight of 10% rolls will be made on the balance 90% rolls, and on that basis the quantity received will be determined.
- b) From each consignment 2% of the film rolls subject to a maximum of 10 rolls will be picked up at random by the representative of the quality control section and one meter of film from each roll will be cut and weighed for substance test to determine the average thickness. Gauge meter /Micro meter will also be used for testing the thickness of the film.
- c) Leak test: The pouches after filling, the sealing shall not show any leakage when subjected to a uniformly distributed load of 25N(2.5Kgf), Pouches kept in flat position for 10 minutes with the side seal on top.
- d) Drop test: 16 samples of filled pouches shall be taken at random from the filling line. The sample bag drawn from the machine shall be dropped from a height of 1.2.metre on a flat , smooth surface in 4 way i.e. a) on flat side, b)on opposite side, c) on flat longer edge and d)on opposite longer edge. The samples shall be deemed to have passed the test if not more than 4 pouches burst in the test.

10. The supplier should produce a certificate obtained from an authorized laboratory stating that the raw material used for manufacture of the pouch film is of FOOD Grade quality, along with first consignment of supply.

11. Norms for pouch film utilization at the production point.

- a) Average length of the sachets 200ml – 160mm and width : 90mm
- b) Yield PACK SIZE (Nos.) – 550 pouches per kg. (tolerance 5%)

12. Penalties:

Clause-I : Thickness of the film:

- i. If the film is within the bulk average of tolerance prescribed thickness, the film will be accepted for payment.
- ii. pouch film, if the film is received with the variation of -1.0 micron to that of the below tolerance limit, it will be accepted with a penalty of a value of 0.0075Kg per kg. Per micron over and above the tolerance limits in addition with 2% of the said value. For example: For 60 microns film, if the film

received with 56 microns (i.e. 1 mic. Below tolerance limit) then the value of penalties will be calculated as $(W \times P \times 0.0075) + 2\% (W \times P \times 0.0075)$ Whereas W- Net weight of the consignment with 56 microns P – Price of per kg film

- iii. pouch film, if the film is received with the variation of +3.0 micron up to +5 microns to that of the above tolerance limits, it will be accepted with a penalty values as follows. For 60 microns film:
 - a) If film received with ≥ 63 microns the penalties will be on the value of 2 times of the decrement in yield.
 - b) If film received with > 65 microns will be rejected.

Clause-II : Penalties for deviations in Dart impact Resistance

As per the specifications given the following classification of penalties are imposed for deviations in Dart impact resistance test. 60 microns 180 to 195 gf Accepted 175 – 179 gf 174-165 gf Below 165 gf Percentage of penalty 5%. 10% Rejected

- i. If the Firm does not supply the film in proper packing as stated under 7(i) packing, penalties will be imposed as deemed fit.
 - ii. For non-compliance of the specifications / parameters for which the penalties are not listed above, the Press reserves right to impose penalties as deemed fit.
- 13.** Though the payments will be effected on the basis of the weighment and tests conducted as detailed above, the total responsibility rests with the supplier till the complete utilization of the film during the period of contract or 3 months time from the date of supply whichever is later. During the course of utilization of film, any problems are confronted on account of manufacturing defects, the suppliers have to replace the film at their cost failing which the costs will be recovered from their bills.
- 14.** Rejections: The material can be rejected on any of the following grounds.
- i. Non-compliance with composition specification:
 - ii. The supplier shall submit a certificate/ declaration for each consignment about the LDPE and LLDPE used with pigment declaration. The company reserves the right to get the film tested at CIPET or at any approved Laboratories. If the test results are not complying with that of the certificates furnished or declaration made by supplier, the entire consignment will be rejected. The test results of these Laboratories shall be final and binding for both buyer and supplier.
 - iii. The amount of consignment shall be recovered from the bills.
 - iv. Press reserves the right for any such consequential actions deemed fit to be taken, including cancellation of contract award.

- v. In case of adverse test results the same shall be treated as breach of the contract by contractor. Further the consignment of the film shall be liable for rejection, the rejected film shall be returned.
- vi. The Annual Rate contract of concerned contractor shall be cancelled.
- vii. 2 mm variation in width of the film at minus side will be accepted only after getting the feedback from the end user. If the variation in width more than - 2mm will be rejected without penalties.
- viii. If the film is having loose or un-even winding, wrinkles or with holes or less width or giving constant over lapping problems or damaged cores and with foreign material or not meeting any of the specifications mentioned under item No. 2, 3 (a, b & g), the film will be rejected.
- ix. If the thickness of the film is more than 1.0 microns on minus side, the film will be rejected.
- x. As mentioned under 3 (d), (e) , (f) & (i), If the film is not meeting the specifications of Tensile strength, Elongation at Break, Dart Impact resistance and slip tests as per IS: 2508-1984, the film will be rejected.
- xi. If the film is with off flavor as against the specification of 3 (h), the film will be rejected.
- xii. If sealing of the film and the printing of the film are not proper as against the specification of 3(j) and 6, the film will be rejected.
- xiii. As mentioned under 9 (c)&(d), If more than 25% leakages are observed in drop test and leak test, the film will be rejected.