Mother Dairy Calcutta  
P.O.-Dankuni Coal Complex, Dist.-Hooghly, Pin – 712 310

**e-Tender for supply of Milk Packaging Poly Film at Mother Dairy Calcutta**

Pur/Tender/073/                                           Dated : 29.11.2018

e-Tender offers (FOR Dankuni Rate/Kg) are invited from Manufacturer/ Dealer/Supplier having PAN, GSTIN Registration No., Trade License, Credentials/P.O. Copy for supplying of **Milk Packaging Poly Film** at Mother Dairy Calcutta Stores at Dankuni as per Specification mentioned below. Our websites: [www.motherdairycalcutta.com/tender](http://www.motherdairycalcutta.com/tender) & [www.wbtenders.gov.in](http://www.wbtenders.gov.in)

<table>
<thead>
<tr>
<th>Tender Reference</th>
<th>Pur/Tender/073, Dated-29-11-2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start date of availability of Tender document in website.</td>
<td>30-11-2018</td>
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<td>Last date for availability of Tender documents in website.</td>
<td>21-12-2018 upto 02.00 pm.</td>
</tr>
<tr>
<td>Last date &amp; time for receipt of bids</td>
<td>21-12-2018 upto 02.00 P.M.</td>
</tr>
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<td>Place of submission of bids</td>
<td>On line</td>
</tr>
<tr>
<td>Date and time of opening of bids</td>
<td>24.12.2018 at 02.00 p.m.</td>
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| Venue of opening of bids | Mother Dairy Calcutta  
P.O. Dankuni Coal Complex  
Dist.Hooghly, West Bengal  
Pin – 712 310 |
| Address for Communication | Mother Dairy Calcutta  
P.O. Dankuni Coal Complex  
Dist.Hooghly, West Bengal  
Pin – 712 310 |

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for Chief General Manager  
Mother Dairy Calcutta
Polyethylene film to be used on Prepac IS-5 Machines/Suitable Machine for Milk Packaging.

1. Offers Shall be accompanied by online Earnest Money Deposit of Rs.50000/- and Tender Fees of Rs.2100/- in favour of “WBCMPF Ltd. Mother Dairy Calcutta” payable at Kolkata. Offers received without Earnest Money will be straightaway rejected. Successful bidder(s) have to submit Security Deposit Amount of Rs.2,50,000.00 (Rupees Two Lakh Fifty Thousand only) which will be kept throughout the contract period. EMD and Security deposit amount will be refunded after successful completion of the orders and contract. No interest would be paid on the said EMD and Security deposit amount with Mother Dairy Calcutta.

2. PAN card copy, G.S.T. Registration certificate, Trade License, IT Return receipt for the Assessment Year-2018-19, Partnership Deed for Partnership Farm, or relevant part of the Constitution in the case of Registered Company. M.O.A. for Limited/Pvt. Limited Company, Credential of Experience for execution of similar nature of work as specified under any Govt./Govt. Undertaking/Co-operative Sector/Other Sectors shall have to be uploaded along with offer.

3. Offers completed in all respect shall be submitted online. The following documents shall be uploaded along with offer.
   a) General Terms & Conditions of Tender.
   b) General Terms & Conditions of Supply.
   c) Annexure – A (Offer Form)
   d) Warranty Certificate.
   e) Specification for LDPE/LLDPE Film.
   f) Credential of Purchase Orders
   g) Original Performance Certificate from Respective Dairies in support of Poly film supply (for new suppliers).
   h) Xerox copy of PAN card, GSTIN Registration certificate, Trade License.
   i) Xerox copy of IT Return receipt for the Assessment Year-2018-19.
   j) Method for Acceptance of Milk Film.

Offer without above documents will be straightaway rejected without any reference to the Tenderer.

4. All offers shall remain valid for a period of 3 months from the due date and may have to be extended further if requested by this administration.

5. Telegraphic and conditional offers shall not be considered.

6. Offers for only Co-extruded, Multilayer (minimum 3 layers) and Printed milk film will be considered.

7. Tenderer shall submit (online) offers for Poly-film in the Format enclosed “Annexure - A” having thickness of minimum 49 microns & maximum 55 microns i.e. 52 + 3 microns for 250/200 ml, minimum 49 microns & maximum 55 microns i.e 52 + 3 microns for 500 ml pouches using proper combination of 50% Octane based LLDPE and LDPE as per the minimum yield/kg. Purchase Orders will be decided on the basis of Lowest Landed Price at F.O.R. Dankuni Price Basis to be delivered at Mother Dairy Calcutta Stores for all varieties of Poly-films inclusive of all taxes, duties, transportation, insurance, Packing & Forwarding Charges, Artworks Correction/Editing & Printing Cylinder making Charges, conversion/processing charges, loading & unloading charges and Mother Dairy Calcutta’s experience about previous performance of the tenderer along with their quality of film and timely supply.
Mother Dairy Calcutta may change the thickness of the film by +5 microns and also the designs/ printing matter to be printed on the Poly Film if required throughout the contract period and it should be communicated to the Party.

8. In case the tenderer is awarded with order for supply of milk film to Mother Dairy Calcutta, Security Deposit shall have to be provided by them as per instruction of the Dairy. If a tenderer is selected, then trial order shall initially be placed for small quantity. If found satisfactory then order for higher quantity may be considered.

9. In case of non-fulfillment/non-compliance of the terms and conditions of the order/contract, Mother Dairy Calcutta shall have every right to forfeit Security Deposit of the supplier and cancel the said order.

10. Tenderer shall submit offers strictly on F.O.R. Mother Dairy Calcutta delivery basis inclusive of GST, packing, forwarding, freight, insurance and charges for Artwork, all printing cylinders, conversion/processing, loading & unloading, based on IPCL's/RIL's rate as on 01.11.2018.

11. 80% payment will be released by Mother Dairy Calcutta within 30 days after receipt of invoice subject to preliminary inspection and balance 20% will be released within 90 days from date of receipt of materials or complete consumption whichever is earlier, if quality is 100% satisfactory. Though Mother Dairy Calcutta will pay 80% within 30 days but if any quantity is found unsatisfactory or unserviceable during use in plant, that rejected quantity shall be lifted by the supplier from Mother Dairy Calcutta's store after puncturing on the rejected film. The selected tenderer shall either make proper replacement within 15 days /or refund the entire amount paid by Mother Dairy for such consignment/s. If this is not complied with, Mother Dairy shall have the right to recover the payments made. Lot number on the poly film cartons should be printed very clearly for easy identification. (Please refer Cl. No. 4 : Rejection under general terms & conditions of supply).

12. Price Calculation for Order:- Price variation (increase/decrease) will be allowed on 1:1 ratio as per IPCL's/RIL's rate revision(s) and effect of rate revision for raw material on the basis of average of the rates prevailing in any month will be considered for the supply scheduled for the next month/months irrespective of the date of revision(s) of raw material price(s) in any particular month. RIL's Raw material Ex-Depot Kolkata, Average Rate of MT of LLDPE Jr. O19010 or LDPE Gr.1005FY20 of a particular month = (Sum of changed Rates/MT irrespective of dates)/ Number of time(s) of Rate changed. For placing the order of a particular month, Revisions of Rates/MT will be considered of previous month’s for calculating the Landed Price of Poly-film.

Present Variety of Poly Films (may change as per our requirement) to be supplied:-

(i) 200 ML TONNED MILK POLY FILM (code-210001)
(ii) 250 ML "MA SHAKTI COW MILK" Poly Film (code-210006)
(iii) Poly Film for “LASSI” (Material code-210009)
(iv) 500 ML "MA SHAKTI STANDARD MILK TRIPTI" Poly Film (code-210014)
(v) 200 Gm "PROBIOTIC DOI" Poly Film (code-210016)
(vi) 400 Gm "PROBIOTIC DOI" Poly Film (code-210017)
(vii) 500 ML "MA SHAKTI PAST. SKIMMED MILK" (C.F.M) Film (code-210021)
(viii) 500 ML "MA SHAKTI Full Cream Milk" Poly Film (code-210022)
(ix) 500 ML "MA SHAKTI T.M." MILK Poly Film (code-210024)
(x) 500 ML "M.S.D.T.M. PUSHTI" Poly Film (code-210028)
(xi) 500 ML "M.S. NEO SPL. COW MILK" Poly Film (code-210029)
(xii) 500 ML "MA SHAKTI STANDARD MILK PREMIUM" Poly Film (may be Launch)

Weighment at Mother Dairy Calcutta shall be final & binding on the successful tenderers.
12. In case of refusal to accept the order or refusal to supply materials after finalisation of the order, Earnest Money Deposit/ Security Deposit of the tenderer shall be forfeited.

13. Canvassing in any form or manner will disqualify the tenderer.

14. Chief General Manager reserves the right to relax the conditions if necessary.

15. Only manufacturers having experience of producing and supplying at least 350 MT Milk Film per year to reputed dairies may participate with documentary evidence in this regard. New suppliers have to submit the performance certificate and credentials (Purchase Order of respective dairies in the last financial year in support of their supply). Without credentials and performance certificate offers will be treated as cancelled.

16. Only Food grade materials (basic raw materials, pigments, additives and printing inks) as mentioned shall be used and manufacturer of the film shall be responsible for any chemical/toxic reaction in the milk pouches. Successful tenderer must furnish declaration with each and every consignment to this effect failing which consignments shall not be accepted. Without the written permission of Mother Dairy Calcutta no raw materials, pigments, additives, printing inks should be changed.

17. New short listed Manufacturer have to supply initially two Mother Dairy designed printed rolls for trial use. Mother Dairy shall not pay any amount for two printed rolls and towards the cylinder cost for such trial supply. If the initial trial is successful then Mother Dairy may order for 1 MT printed film for further testing. If the second trial is successful then Mother Dairy Calcutta may consider for suitable order quantity.

18. Mother Dairy shall not pay any amount towards the cylinder cost for making new cylinder/modification cylinder, if necessary, at any stage during the contract period.

19. Mother Dairy normally uses Pigmented two/three colours poly film. However supplier should quote the rate for other varieties also. Raw material cost to be considered on the day of publication of the tender.

20. Chief General Manager also reserves the right to accept any or reject any or all offers in part or full without assigning any reason whatsoever. Chief General Manager shall engage minimum two suppliers.
General Terms & Conditions of Supply

1. Conformity to Specification/Sample/Artwork/Drawing:-
The equipment/material under purview of the supply shall strictly conform to the specification/sample/Artwork/drawing enclosed with the order. Mother Dairy Calcutta reserves the right of inspection at any stage of Printing/fabrication/manufacture of the equipment/material.

Test/Inspection certificate, whenever applicable should be obtained from the concerned authority/principal manufacturer either regarding quality or any other details of the items utilised in the process of manufacture/fabrication and forwarded to us along with supplies. Copies of invoices for raw material purchased (50% Octane based LLDPE & LDPE both) from manufacturers has to be submitted by the tenderer to Mother Dairy Calcutta, before release of payment for each consignment. Food Grade certificate(s) of Poly Film is to be provided in each consignment.

2. Delivery Period:-
Delivery period as indicated in our Purchase Order shall be essence of the contract and suppliers are expected to adhere strictly to the delivery schedule unless extension of delivery date is granted. For such extension the supplier shall approach in writing to Mother Dairy in advance with valid reasons and supporting documents well before the due date of supply.

3. Penalty Due to Late Delivery:-
In case deliveries are not effected within the stipulated delivery date, penalty will be imposed @ 1/2 % for every fortnight's delay or part thereof. In the event of non-delivery of the materials within the stipulated time, we reserve the right to cancel the order and procure the material/equipments from any other sources.

4. Rejection:-
Mother Dairy Calcutta reserve the right to reject any material equipment/part of the supply if found defective and for non-conformity to the standard specified by Dairy. Supplier shall be responsible for making replacement for the rejected items within 15 days from the date of intimation failing which Mother Dairy shall have the right to reduce the order quantity or cancel the order.

5. Warranty:-
The supplier must provide a warranty for a minimum period of one year from the date of supply of material for satisfactory performance of the material according to the design & details of specification given or any other norms fixed by this administration.

6. Guarantee:-
The supply of material if entrusted shall have to be carried out by you (supplier) to the entire satisfaction of Mother Dairy Calcutta in terms of both quality and quantity. Supplier must give guarantee to replace without any extra cost, the material or part thereof if found defective due to bad design, faulty workmanship, or substandard material within 1 month from the date of receipt of the material. You have to arrange to take back the defective material from Mother Dairy at your cost. If payment has already been made then the entire cost shall be recovered from the supplier.

7. Cancellation of Order:-
We shall be free to cancel our order either in part or full in case of non delivery of material within the stipulated delivery period or breach of any one of the clauses mentioned herein. Consequential losses, if any, on account of getting installation done or obtaining supplies from alternative sources beside payment of higher rates shall be recovered from you. In the event of cancellation of the order, you will be liable to refund the advance amount, if paid any, to Mother Dairy Calcutta in full. Suppliers will have no right to
forfeit the advance amount received by them.

8. **Sub-Contract:-**
   No Sub-Contract is allowed.

9. **Packing, Forwarding & Insurance:-**
   Outstation manufacturer/suppliers shall always despatch materials/equipments freight paid consigned to us at Mother Dairy Calcutta, P.O.Dankuni Coal Complex, Dist. Hooghly, West Bengal, Pin-712 310 duly packed and insured and freight paid. The packing should be of highest standard for protection against pilferage/transit damages etc. Poor packaging will lead to rejection and no dirt, dust, lubrication, dead insect is allowed in the packages and the film shall be summarily rejected if delivered in such condition.

10. **Submission of Bills:-**
    Bill shall be drawn in the name of Chief General Manager, Mother Dairy Calcutta and shall be routed through In-charge (Purchase) in triplicate. It is also obligatory for the suppliers to attach receipted Original challan, duplicate copy of our Purchase Order duly acknowledged, packing list, test certificate and any other relevant documents as may be necessary.

11. **Force Major Clause:-**
    The terms & conditions mutually agreed upon shall be subject to Force Major Clause. Neither the supplier nor the purchaser shall be considered in default in performance of its obligations hereunder, if such performance is prevented or delayed because of war, hostilities, revolution, civil commotion, strike, epidemic, accident, fire, wind, flood, earthquake or because of any law, proclamation, regulation or ordinance of any Government or of any act of God or of any other cause whether of similar or dissimilar nature, beyond the reasonable control of the party affected. Should one or both the parties be prevented from fulfilling their contractual obligations by a state of Force Major lasting continuously for a period of six months, the two parties should consult each other regarding the future implementation of the contract.

12. **Arbitration:-**
    If any dispute or difference shall at any time arise between the two parties in respect of this order or concerning anything herein contained or arising out of this order, or as to the rights, liabilities or duties of the said parties hereunder, or as to the recovery of any amount, the same shall be referred to the sole arbitration of Managing Director, West Bengal Co-operative Milk Producers' Federation Ltd, Block LB-II, Sector-III, Salt Lake City, Kolkata-700 098. The decision of the Arbitrator shall be final and binding on the parties. The Hon'ble High Court at Kolkata shall have exclusive jurisdiction as regards any dispute/arbitration under these terms irrespective of any jurisdiction clauses mentioned hereinabove or subsequently in other place(s). The arbitration proceedings shall be governed by the provisions of the Arbitration and Conciliation Act, 1996 and rules made there under or any enactment or statutory modifications thereof for the time being in force.

    for Chief General Manager
Dear Sir,

I/we hereby offer to supply ____________________________ as per Mother Dairy Calcutta's specification and design. Food Grade certificate(s) of Poly Film will be provided in each consignment.

1. We have submitted Earnest Money deposit & Tender Fees through online for Total Rs.____________________ dated___________ (online successful payment receipt to be uploaded).

2. We have noted that Mother Dairy reserves the right to accept any or reject any or all offers in part or full or decide/divide orders without assigning any reason whatsoever.

3. We also offer to supply polyethylene film (50% Octane based LLDPE & LDPE) @_______________MT per month. Our production capacity is ___________MT per month.

4. Address and Location of the plant :-

Rate(s) to be Offered for F.O.R Mother Dairy calcutta Store at Dankuni inclusive of Taxes, Duties, Packing, forwarding, freight Insurance, Packing & Forwarding Charges(if any), Artworks Correction/ Editing & Printing Cylinder making Charges, Loading and Unloading charges. (Rs./kg in figures as well as in words) for 50% Octane based LLDPE (Gr-O19010) & LDPE(1005FY20) or equivalent.

Minimum 69 microns & maximum 55 microns i.e 52 + 3 microns for 500 ml pouches.

i) Pigmented Three Colours

ii) Pigmented Four Colours

Seal of the company __________________________
Signature of the constituted Attorney of the company.

Date ________________________
DECLARATIONS

1) The above landed prices are based on following table:

(i) **Effective Date: 01.11.2018**

<table>
<thead>
<tr>
<th>Ex-Depot Kolkata Price of Gr.O19010 LLDPE (Rs./MT)</th>
<th>Ex-Depot Kolkata Price of Gr.1005FY20 LDPE (Rs./MT)</th>
<th>Average Rate/MT of RIL of LLDPE &amp; LDPE (Rs./MT)</th>
<th>Pigment 3-Colours conversion /Processing Charge/kg (all charges inclusive) (Rs)</th>
<th>GST @ 18% on (D+E) to be considered for Poly Film Items (Rs)</th>
<th>Landed price of Poly Film per Kg at FOR Dankuni price basis (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A)</td>
<td>(B)</td>
<td>(A+B)/2 = C</td>
<td>(D)</td>
<td>(E)</td>
<td>(F)</td>
</tr>
<tr>
<td>100680.00</td>
<td>99710.00</td>
<td>100195.00</td>
<td>100.195</td>
<td>Rs.X</td>
<td>GST @ 18% on (D+E) Rs._______</td>
</tr>
</tbody>
</table>

**Note:** If more than one Rate/MT is available (irrespective of date) in a month for above each grade, then average will be calculated taking changed Rates.

**Quoted Conversion/Processing charge Rs.X will be valid for minimum two years.**

(ii) **Effective Date: 01.11.2018**

<table>
<thead>
<tr>
<th>Ex-Depot Kolkata Price of Gr.O19010 LLDPE (Rs./MT)</th>
<th>Ex-Depot Kolkata Price of Gr.1005FY20 LDPE (Rs./MT)</th>
<th>Average Rate/MT of RIL of LLDPE &amp; LDPE (Rs./MT)</th>
<th>Pigment 3-Colours conversion /Processing Charge/kg (all charges inclusive) (Rs)</th>
<th>GST @ 18% on (D+E) to be considered for Poly Film Items (Rs)</th>
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</table>

**Note:** If more than one Rate/MT is available (irrespective of date) in a month for above each grade, then average will be calculated taking changed Rates.

**Quoted Conversion/Processing charge Rs.Y will be valid for minimum two years.**

[Please enclose IPCL’s/RIL’s Raw Materials Price Lists based on which you have quoted.]

2) We shall either submit GP-1 or Excise Certificate in lieu of GP-1 with undertaking to the effect that Mother Dairy Calcutta shall have no obligation/liability for this.

3) We promise to provide Mother Dairy Calcutta with Photo copies of price list of IPCL & RIL whenever there will be any revision of rates. In case of failure/delay on our part Mother Dairy Calcutta shall in no way be responsible for delays in issue of orders/amendments and or release of payments.

4) We also agree to accept order for a minimum quantity of 1 MT.

5) We shall submit documents along with each consignment of film confirming use of raw materials (50% LLDPE Octane & LDPE) pigments, additives, printing inks etc. strictly as per specification of Mother Dairy Calcutta.

___________________________        ________________ ____________
Seal of the company            Signature of the constituted Attorney of the company.

Date _________________

___________________________
Date _________________

Signature of the constituted
Attorney of the company.
ANNEXURE - 'B'

Warranty Certificate

The seller hereby declares that .........................sold under this contract shall strictly conform to Mother Dairy's requirement as per the enclosed and accepted specification and the seller hereby guarantee that the said stores would continue to conform to the description and quality as per the enclosed accepted specification for a period of one year from the date of commissioning of the equipment/material for satisfactory performance. Notwithstanding this certificate if during the aforesaid period of one year, the said stores be discovered not to conform to the description and quality aforesaid or have deteriorated then the decision of Mother Dairy in this regard will be final and conclusive. Mother Dairy will be entitled to reject the said stores or such portion thereof as may be discovered not to conform to the said description and quality. On such rejection, the stores shall be at Sellers' risk and the seller shall be required to replace the goods or such portion thereof as is rejected by Mother Dairy and to remove the rejected stock within such reasonable period as may be decided by General Manager, Mother Dairy, otherwise the seller shall pay to Mother Dairy such damages as may arise on account of such rejection. Nothing herein contained shall prejudice any other right of Mother Dairy in that behalf under this contract or otherwise.

________________________
Signature of the Supplier
or his Constituted Attorney.
SPECIFICATION FOR 50% OCTANE BASED LLDPE/LDPE FILM FOR PACKING OF LIQUID MILK ON POUCH FILLING MACHINE

1.0 SCOPE:
1.1 This specification prescribes requirement of low density polyethylene film for packing of liquid milk on pouch machine (IS-5)/ (IS-6)

2.0 PROCESS:
2.1 The film shall be blown by co-extrusion process with triple co-extrusion.

3.0 MATERIALS:
3.1 The film shall be manufactured using virgin indothene granule of IPCL grade 1005FY20 or equivalent LDPE and 50% Octene based LLDPE of M/s. RIL (O 19010)/or equivalent with the food grade requirements given in IS:10146-1986 and IS:10141-1982. Virgin food grade LDPE and virgin food grade LLDPE will be blended. The pigments used if any shall be from those listed in any of the above mentioned standards. The thickness of the film shall be within specified thickness as mentioned earlier in clause No 9 of general terms & conditions of tender.

4.0 DIMENSION:
4.1 Various dimensions such as thickness of the film, with tolerance on the width and thickness, core diameter, outside diameter are given in the enclosed Statement-I.

5.0 GENERAL REQUIREMENTS:
5.1 The film shall be clean and transparent/opaque as may be required. It shall be uniform in texture and finish. The film shall be free from pin holes, streaks, particles of foreign matter and undispersed raw material & free from insects. There shall be no other visible defects such as holes, tears or blisters. The edges shall show no impression of handling on the surface of the film. The film shall have even and wrinkle free surface.

5.2 ODOUR: The film shall be free from any odour.

6.0 YIELD:
6.1 For a given film thickness, pouch length and packing, minimum guaranteed yield per kg of the film is given in the Statement-I. However, if yield is found on lower side, proportionate deduction may be made from supplier's bills or the film may be rejected.

7.0 OTHER REQUIREMENTS:
7.1 Winding: The film shall be wound on the new core made of strong paper, having 70 mm inner diameter uniformly and with proper tension which shall form trimmed perfect edge. The rolls shall be packed in such manner to prevent any telescoping of the film layers and securely packed against damage from outside atmospheric agents in handling and transit. The maximum diameter of normal rolls should not exceed 500 mm.

7.2 Curvature: The sheet must be straight to the extent that when unwound from the roll the centre drive of the film should not deviate more than 13 mm in 30 meters length. The film shall have static electricity removed and free from pin holes and fish eyes.

7.3 Printing: The film shall be printed in one/two/three/four colours in approved design of Mother Dairy Calcutta. The printing shall be carried out by colour flexographic/rotogravure process. Ink used for printing shall conform to IS:6931-1972 and shall be permissible under PFA rules. Colour and ink used shall be approved for packaging of food material especially milk for human consumption.
and conform to all applicable food and drugs regulations. The ink shall not bleed or spread over the heating element.

The ink and the resulting printing shall have sufficient light fastness. The print shall be neat and clear in all respects.

For Double Toned Milk Film & Cow Milk film should be printed with printing ink of M/s. Coates of India Limited. Design and colour will be selected by Mother Dairy.

Code Nos. & Descriptions will be as below :-

<table>
<thead>
<tr>
<th>Code Nos.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NL 6339</td>
<td>Gravaure Polysafe Mother Dairy Blue</td>
</tr>
<tr>
<td>NL 6347</td>
<td>Gravaure Polysafe Mother Dairy Red</td>
</tr>
<tr>
<td>NL 6348</td>
<td>Gravaure Polysafe Mother Dairy Green</td>
</tr>
<tr>
<td>LTS 3968</td>
<td>Spl. Modflex Yellow</td>
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<tr>
<td>LTS 3969</td>
<td>Spl. Modflex MD Cream Buff</td>
</tr>
<tr>
<td>B 8820</td>
<td>Gravaure Poly Retarder</td>
</tr>
<tr>
<td>NL 4226</td>
<td>Gravaure Poly Reducer</td>
</tr>
<tr>
<td>NL 6349</td>
<td>Gravaure Polysafe Ink Medium</td>
</tr>
</tbody>
</table>

Mother Dairy reserves the right to cancel the consignment (part/full) if the printing (colour) is found of poor & substandard quality & not conforming to above specification. Colour density should be minimum 80% and above. However deduction shall be made @ 0.5% of total per 10% of colour below 80%. If colour is less than 50% the defective rolls shall be rejected.

7.4 **Marking** : Each roll shall be marked legibly to give the following information :-

1. Name, type and thickness of the film.
2. Name and address of the manufacturer.
3. Name and address of Mother Dairy Calcutta.
5. Batch No. and date of manufacture.

7.5 **WASTAGE**:

The overall operational wastage of film on handling in Plant & Cold Store during packing milk & storage of filled pouches in Cold Store shall not be more than 1.5% of the weight of film used.

8.1 **TESTS**:

a) **Leak test** : The milk pouches made from the film, when filled with milk at about 4 to 7 degree C. and sealed, shall not show any leakage when subjected to uniformly distributed load of 2.5 kg for 500 ml pouch and 5 kg for 1 ltr. pouch in flat position for 10 minutes with side seal on top.

b(i) **Drop test** : The filled pouches made from the film when subjected to the drop test shall not burst or show leakage of the contents.

Sixteen samples of filled pouches shall be taken at random from the filling line. The temperature of the filled pouches shall be maintained within 4 degree C of the filling temperature of the milk.

Sample pouches drawn from the machine as above shall be dropped from a height of 2 metre for 500 ml packet and 1.5 metre for 1000 ml packet on a flat, smooth surface. Each pouch shall be dropped four times in the following sequence :-

1. On flat side,
2. On opposite side,
3. On flat longer edge, and
4. On opposite longer edge.
The samples shall be deemed to have passed the test if not more than two pouches burst in the test.

ii) If during packaging and or transportation, the leakages are found high, then the film may be rejected.

c) **COLOUR FASTNESS TESTING OF FILM:**
Immerse printed piece of film in milk and leave for 12 hours in milk. At a temperature of about 4 to 7 degree C. After removing the film from the milk, wipe it with a cloth and dry it. Rub the printed surface with tissue paper gently by hand. The ink removal from the print shall not be to the extent to render the printed matter not readable clearly after test.

d) Thickness: The thickness of the film shall be assessed by its withstanding the drop test and leak test and also as per procedure laid down in IS 11805, 1989.

for Chief General Manager

________________________
### STATEMENT - I

<table>
<thead>
<tr>
<th><strong>Particulars</strong></th>
<th><strong>Specification</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Raw Materials</td>
<td>Made from combination of 50% Octene based LLDPE (RIL Reclai O 19010 or equivalent) &amp; IPCL 1005FY20 50% LDPE (Virgin Indothene or equivalent).</td>
</tr>
<tr>
<td>b) Thickness of film</td>
<td><strong>For 250 ml</strong> - minimum 49 microns &amp; maximum 55 microns i.e 52 + 3 microns&lt;br&gt;<strong>For 500 ml</strong> - minimum 49 microns &amp; maximum 55 microns i.e 52 + 3 microns</td>
</tr>
<tr>
<td>c) Width of film</td>
<td>323 + 2 mm&lt;br&gt; - 0 mm</td>
</tr>
<tr>
<td>d) Hot Tack Strength</td>
<td>230g/25 m.m. minimum</td>
</tr>
<tr>
<td>e) Dart Impact strength</td>
<td>4.0g/micron</td>
</tr>
<tr>
<td>f) Tear strength</td>
<td>MD = 6 g/micron, TD = 18 g/micron</td>
</tr>
<tr>
<td>g) Density</td>
<td>0.918 g/cc</td>
</tr>
<tr>
<td>h) Mean failure height</td>
<td>2 mtrs. minimum for a sachet of 500 ml. &amp; 1.5 mtrs. minimum for a sachet of 1000 ml. on dropping the filled pouch and leak test &amp; drop test shall be carried out as per 8.1(a) and b(i) &amp; (ii) of specification of film.</td>
</tr>
<tr>
<td>i) Weight per roll</td>
<td>The net weight of roll should be minimum 18 kgs. and maximum 22 kgs. and nos. of joints per roll should not exceed 2 in any case.</td>
</tr>
</tbody>
</table>

Mother Dairy may change the thickness of the polyfilm and accordingly yield/kg. shall be proportionately changed.

j) **Guaranteed yield per kg film :**
   - For 50% octene based LLDPE & LDPE combination.
   
   (i) About 570 sachets with thickness of minimum 49 microns & 55 microns i.e 52 + 3 microns and length 100 + 5 mm. for 200 ml pouches.
   
   (ii) About 400 sachets with thickness of minimum 49 microns & 55 microns i.e 52 + 3 microns and length 155 + 5 mm. for 1/2 ltr pouches.

Not withstanding anything given in the specification, the film shall perform the purpose required of it in the most sufficient manner.

for Chief General Manager
**Method for acceptance of Milk Film**

1. Scale of sampling of film will be done as per I.S. 2508-1984

2. The thickness at six different points will be determined with a strip of 10 mm. length by dividing the strip into six divisions by folding and measuring the thickness at the centre portion of each division.

3. The printing of the film will be tested by the cellotape method by slowly removing the tape and also by keeping the strip in refrigerator.

4. The consignment will be primarily accepted if the variation with respect to thickness, width, printing, winding etc. conform to the specified standard for number of rolls tested, e.g. if out of 35 samples tested, more than 4 rolls show more thickness than the specified one (i.e. more than specified microns for 1000 ml and specified microns for 500 ml.) the consignment will not be accepted and the supplier will be duly intimated so that they can carry out necessary segregation etc., as the case may be at their own cost.

5. For these 4 rolls, deduction will be made as outlined below:

Very high thickness films shall be rejected. Film more than 60 micron for 1/2 ltr pouches shall be rejected.

The Method for deduction for slightly higher thickness film will be as follows:

a) Average weight per roll will be calculated from the number of rolls supplied and the net weight of the rolls received at Dairy.

b) The number of rolls represented per sample will be calculated depending on the number of rolls supplied and the number of rolls tested as samples.

c) The total no. of the rolls represented per sample will be calculated and for each variation of 1 micron above 55 microns for 500 ml. the deduction rate will be 0.0179 kg/kg. of rolls received. We may accept maximum upto 5 micron more than the specified maximum thickness limit mentioned in (b) of Statement-I, subject to deduction mentioned in clause.

However film thickness more than 60 micron (1/2 ltr) shall be straight way rejected.

**One Simple Illustration (1/2 ltr. film) :-**

Suppose, 540 rolls have been supplied with a net weight of 11952kgs.

Wt./Roll= 11952/540 = 22.13 kgs.

No. of samples to be tested = 35.

No. of rolls represented/sample = 540/35 = 15.43

5 nos. of rolls to be tested as outlined in clause (2).

Length/kg. with standard specification (i.e. 323 mm./55 microns the maximum limit of thickness). (500 ml. pkt)
for 56 microns,

\[
\frac{6}{10} \times 0.918 \times 55 \quad = \quad \frac{10}{6} \times 16308.27
\]

\[
L \, / \, Kg. = \frac{6}{10} \times 0.918 \times 56 \quad = \quad \frac{10}{6} \times 16604.784
\]

Now, 61.3186 mt. of standard film will represent 1 kg. of film & 60.2236 mt. of 56 microns film will represent = 60.2236/61.3186 =.9821 kg. of standard film i.e 0.0179 kgs. less. This procedure of deduction shall continue upto 60 micron (1/2 ltr.) & beyond this, the film shall be rejected outright.

Therefore, for variation of 1 micron above 55 microns the deduction rate from the wt. will be 0.0179 kg./kg. of film maximum upto 60 microns.

So in this particular case, 15.43 rolls with total wt. of 15.43 x 22.13 kgs. i.e., 341.47 kgs., the deduction will be for 6.1123 kg (341.47 x 0.0179) kgs. expressed in terms of money and the payment will be only for (341.47 - 6.1123) = 335.3577 kgs.

For all such variation, the deduction rate will be cumulative with the standard specified range only. However it should be noted that the thickness of film above 60 microns for 1/2 ltr film shall be rejected.

6. During inspection, the sample rolls will be tried out on our packaging machine and if film wastage during production and in Cold Store is more than 1.5% then the consignment may be rejected.

7. No other major defect of film shall be accepted by Mother Dairy. Burnt particles/sand/or any foreign material, if found in the film, shall be rejected.

8. In addition to all these, for any problem faced during the actual use of the whole consignment, the supplier will be informed and suitable adjustment will be made in the same or future consignments.

for Chief General Manager

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