Project Profile on Petroleum Jelly

1. Product : Petroleum Jelly

2. Quality Control & Standards : As per IP, BP, USP

specifications

3. Production Capacity : 150 M.T. per Annum

4. Month & Year of Preparation : January, 2011



Prepared By Govt. of India

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1. INTRODUCTION:

Petroleum Jelly is also known as Mineral Jelly or Petrolatum. It is mostly used in emulsion form in cosmetics & pharmaceutical for the preparations of various creams, ointments, lotions etc. Commercial Petroleum Jelly is used in the manufacturing of lubricants & Grease. Petroleum Jelly of good quality is used in Vaseline manufacturing. It is also used as a moisturizer in good quality toilet soaps. It also finds its use as a anti rusting agent for iron goods like blade, wire surgical instruments etc. It is available in the market in various forms. It may be white, yellow, green or may be of some colour depending upon ingredients used. This project is prepared for white petroleum jelly, which can be used in cosmetics and pharmaceuticals. Hence strict quality control is required for the manufacturing of this item.

2. MARKET POTENTIAL:

Various Cosmetics and pharmaceuticals are used by the large number of people in general for wounds, cuts, burns, skin diseases. In today's business word, more and cosmetics industries are coming up and there by increasing the demand for the raw materials like petroleum jelly. Hence it can be assumed that the petroleum jelly is having very good market potential in view of development of cosmetic & pharmaceutical industry in India.

3. BASIS & PRESUMPTIONS:

- **a.** The production is based on single shift of eight hours and 300 working days per annum.
- **b.** The cost in respect of Plant & Machinery has been taken at the time of preparation of Project Profile, which may vary from place to place and time to time.
- **c.** Labour charges has been taken as per Govt. norms.
- d. It is presumed that plant will work at 50% efficiency in the first year, 60% in the second year and 70% in the third year.

4. IMPLEMENTATION SCHEDULE:

It will take about eight months to start commercial production as under:

| Sr. No. | Activity | Estimated Period |
|---------|--|-------------------------------|
| 01. | Registration under MSME Act | 0 – 1 Month |
| 02. | Preparation of Scheme | 0 –1 Month |
| 03. | Sanction of Loan | 1 – 5 Month |
| 04. | Placement of Order for Plant & Machinery | 5 – 6 Month |
| 05 | Power & Water Connection | 5 – 6 Month |
| 06. | Installation of Plant & Machinery | 6 – 7 Month |
| 07. | Procurement of Raw material & Trial Run | 7 – 8 Month |
| 08. | Commercial Production | 8 th Month onwards |

4. TECHNICAL ASPECTS:

a. Production Capacity : 150 M.T. per Annum

b. Quality Control & Standards: As per IP, BP, USP specs

The requirements for Sodium Hypochlorite Solution are as under:

| Sr. No. | Characteristics | Standard |
|---------|---|--------------------------|
| 01. | Appearance | White soft, translucent, |
| | | unctuous mass. |
| 02. | Solubility | As per IP |
| 03. | Acidity / Alkalinity / light absorption | As per IP |
| 04. | Fixed oil / fats & rosin, foreign organic | As per IP |
| | matter | |
| 05. | Melting Point | 38-56°C |
| 06. | Sulphated Ash | 0.1 % max. |

c. PRODUCT MIX:

The product mix varies depending upon quality and use of final product. One of the formulae for petroleum jelly may be as under:

| Sr. No. | Item | Quantity (%) |
|---------|----------------------|--------------|
| 01. | Paraffin Wax | 20 % |
| 02. | Microcrystalline Wax | 20 % |
| 03. | White Oil | 60 % |

(d) Manufacturing Method:

First of all , the ingredients are weighed as per the formulations. Now paraffin wax is taken in to reaction vessel with electrical heater (Jacketed). Now micro crystalline wax is added in to reaction vessel. Both the waxes are then melted with continuous mixing and the temperature is maintained between 120° – 130° C. Now liquid paraffin is added with continuous stirring (150-200 rpm) at constant temperature, so that ingredients are mixed together to form emulsion or jel. The whole mass is cooled down and sample is taken for testing. After testing, material is packed in suitable containers.

| FINA Sr. | ANCIAL ASPECTS | | | | | Value |
|--------------|--|---------------|----------|------------|-------|----------------|
| No. | Description | | Quantity | | | (Rs.) |
| Α. | Land & Building | | quantity | | | (1.01) |
| 7 | Covered Area of 2000 sq. ft. on | | | | | |
| | rent | | L.S. | | | 10,000 |
| B. | Machinery & Equipments | | | | | |
| | Cylindrical Alluminium jacketed Re | eaction | | | | |
| (i) | Vessel | | 1 No | | | 30,000 |
| | with motor & stirer | | | | | |
| (::) | Alluminium Storage Vessels Cap: | 250 Kg. | 4 N | | | 20.000 |
| (ii) | Each. | | 4 Nos. | | | 30,000 |
| (iii) | Laboratory Equipments | | L.S. | | | 50,000 |
| (iv) | Office Furniture | aa @ | L.S. | | | 25,000 |
| | Installation & Electrification Charge 10% of the cost of Machinery & | es w | | | | |
| | Equipments | | | | | 11,000 |
| | Equipmento | | | | | 11,000 |
| | | | Total | | | 156,000 |
| | Raw & Packing Materials per | | | | | • |
| C. | Month | | | | | |
| Sr. | - | Rate | | | Qty | Value |
| No. | Item | (Rs.) | (Kg.) | | | (Rs.) |
| (i) | Paraffin Wax | 90 | | | 1,250 | 112500 |
| (ii) | Microcrystalline Wax | 225 | | | 1,250 | 281250 |
| (iii) | White Oil | 80 | | | 3,750 | 300000 |
| (iv) | Packing Material | L.S. | | | | 25,000 |
| _ | | | | Total | | 718750 |
| D. | Staff & Labour per Month. | Data | | | | Value |
| Sr. No. | Item | Rate (Rs.) | | Nos. | | Value (Rs.) |
| | | ` , | | _ | | • , |
| (i) | Manager | 6000 4000 | | 1 | | 6000 |
| (ii) | Supervisor / Chemist Skilled Workers | | | 1 | | 4000 |
| (iii) | | 3000 | | 1 | | 3000 |
| (iv) | Unskilled Workers | 2500 4000 | | 2 | | 5000 |
| (v) | Sales Executive | 4000 | | 1 Total | | 4000 |
| | | | | Total | | 22000 |
| (E) | Utilities per Month | | | | | |
| Sr. | otilitios por illiontil | Rate | | | | Value |
| No. | Item | (Rs.) | | Qty | | (Rs.) |
| (i) | Power | 5.5 | | | 600 | 3300 |
| | | | | | | |
| (ii) | Fuel & Water | L.S. | | | L.S. | 1000 |
| | | | | Total | | 4300 |

| (F) | Other Expenses per Month | | | | |
|--|--|----|-------|--------|--|
| (i) Sr. No. (i) (ii) (iii) (iv) (v) (vi) | Item Rent Postage & Staionery Telephone Repair & Maintenance Insurance Marketing & Travelling Expenses | | Total | | Value (Rs.) 10000 1000 2000 1500 500 10000 25000 |
| (C) | Working Capital par Month | | | | 770050 |
| (G) | Working Capital per Month | | | | 770050 |
| (H) (i) (ii) | Total Capital Investment (T.C.I.) Fixed Capital Working Capital for three Months | | Total | | Value (Rs.) 156,000 2310150 2,466,150 |
| | Financial Analysis | | | | |
| | Cost of Production per | | | | |
| (a) (i) | Annum Raw Materials | | | | Value (Rs.) 8625000 |
| (ii) | Staff & Labour | | | | 264000 |
| (iii) (iv) | Utilities Other Expanses | | | | 51600 300000 |
| (iv) | Other Expenses Depreciation on Machinery & | | | | 300000 |
| (v) | equipments@ 10% | | | | 15600 |
| (vi) | Interest on Total Capital Investment @ 12% p.a. | | | | 295938 |
| (*') | 1270 p.a. | | Total | | 9552138 |
| (b) | Turnover per Annum @ Rs.75000 per M.T. for 75 MT | 75 | | 137000 | 10275000 |
| (c) | Net Profit per Annum Net profit = Total turnover - Total Cost of Production | of | | | 722862 |

(d) Profit on turnover

Net Profit

% Profit = ----- x 100 **7.04** % Total Turnover

(e) Rate of Return (ROR) on T.C.I.

Net profit

ROR = ----- x 100 **29.31 %** T.C.I.

(f) Break - Even Analysis

| | Fixed Cost | | (Rs.) |
|-------|--|-------|--------|
| (i) | Depreciation on machinery & Equipments @ 10% | | 15600 |
| (ii) | Interest on Total Capital Investment @ 12% | | 295938 |
| (iii) | 40 % of Salary & Wages | | 105600 |
| (iv) | 40 % of other Expenses | | 120000 |
| | | Total | 537138 |

Value

(g) Break - Even Point (B.E.P.)

Fixed Cost

B.E.P. = ------X 100 42.63 %

Fixed Cost + Profit

FINANCIAL ASPECTS

| | ANOTAL MOI LOTO | | | Value |
|------------|---------------------------------------|--------------|-------|--------|
| Sr. No. | Description | Quantity | Value | (Rs.) |
| A. | Land & Building | | | |
| | Covered Area of 500 sq. mtrs. on | L.S. | | |
| | rent | Rs.10,000.00 | | 20,000 |
| B. | Machinery & Equipments | | | |
| | M.S.Saponification Vessel, Cap: | | | |
| (i) | 100 Ltrs | 1 No | | 26,000 |
| | per batch | | | |
| | M.S.Mixing Vessel, Cap: 250 Ltrs. per | | | |
| (ii) | batch. | 1 No. | | 44,000 |
| (iii) | M.S. Storage Tank | 3 Nos. | | 66,000 |
| (iv) | Automatic Filling Machine | 1 No. | | 83,000 |
| | | | | |

| (v) | Installation & Electrification Charge 10% of the cost of Machinery & Equipments | es @ | | | 11,000 |
|---|---|--------------------|-------------------------|-------------|--|
| | | | Total | | 250,000 |
| | Raw & Packing Materials per | | | | |
| C. Sr. | Month | Rate | | | Value |
| No. | Item | (Rs.) | Qty (Kg.) | | (Rs.) |
| (i) | Paraffin Wax | 90 | · , (3 / | 1,250 | 112500 |
| (ii) | Microcrystalline Wax | 225 | | 1,250 | 281250 |
| (iii) | White Oil | 80 | | 3,750 | 300000 |
| (iv) | Packing Material | L.S. | | | 25,000 |
| . , | · · | | Total | | 718750 |
| D. | Staff & Labour per Month. | | | | |
| Sr. | _ | Rate | | | Value |
| No. | Item | (Rs.) | Nos. | | (Rs.) |
| (i) | Manager | 6000 | 1 | | 6000 |
| (ii) | Supervisor / Chemist | 4000 | 1 | | 4000 |
| (iii) | Skilled Workers | 3000 | 1 | | 3000 |
| (iv) | Unskilled Workers | 2500 | 2 | | 5000 |
| (v) | Sales Executive | 4000 | 1 Tatal | | 4000 |
| | | | Total | | 22000 |
| | | | | | |
| (E) | Utilities per Month | | | | |
| (E) Sr. | Utilities per Month | Rate | | | Value |
| | Utilities per Month Item | Rate (Rs.) | Qty | | Value (Rs.) |
| Sr. | • | | Qty | 600 | |
| Sr. No. (i) | Item Power | (Rs.) 5.5 | Qty | | (Rs.) 3300 |
| Sr. No. | Item | (Rs.) | · | 600 L.S. | (Rs.) 3300 1000 |
| Sr. No. (i) | Item Power | (Rs.) 5.5 | Qty Total | | (Rs.) 3300 |
| Sr. No. (i) (ii) | Item Power Fuel & Water | (Rs.) 5.5 | · | | (Rs.) 3300 1000 |
| Sr. No. (i) | Item Power | (Rs.) 5.5 | · | | (Rs.) 3300 1000 |
| Sr. No. (i) (ii) (F) Sr. No. | Item Power Fuel & Water | (Rs.) 5.5 | · | | 3300 1000 4300 |
| Sr. No. (i) (ii) (F) Sr. | Item Power Fuel & Water Other Expenses per Month | (Rs.) 5.5 | · | | 3300 1000 4300 Value |
| Sr. No. (i) (ii) Sr. No. (i) (ii) | Item Power Fuel & Water Other Expenses per Month Item Rent Postage & Staionery | (Rs.) 5.5 | · | | (Rs.) 3300 1000 4300 Value (Rs.) 10000 1000 |
| Sr. No. (i) (ii) (iii) (iii) | Item Power Fuel & Water Other Expenses per Month Item Rent Postage & Staionery Telephone | (Rs.) 5.5 | · | | (Rs.) 3300 1000 4300 Value (Rs.) 10000 1000 2000 |
| Sr. No. (i) (ii) Sr. No. (i) (iii) (iii) (iv) | Item Power Fuel & Water Other Expenses per Month Item Rent Postage & Staionery Telephone Repair & Maintenance | (Rs.) 5.5 | · | | (Rs.) 3300 1000 4300 Value (Rs.) 10000 1000 2000 1500 |
| Sr. No. (i) (ii) (F) Sr. No. (i) (iii) (iv) (v) | Item Power Fuel & Water Other Expenses per Month Item Rent Postage & Staionery Telephone Repair & Maintenance Insurance | (Rs.) 5.5 | · | | (Rs.) 3300 1000 4300 Value (Rs.) 10000 1000 2000 1500 500 |
| Sr. No. (i) (ii) Sr. No. (i) (iii) (iii) (iv) | Item Power Fuel & Water Other Expenses per Month Item Rent Postage & Staionery Telephone Repair & Maintenance | (Rs.) 5.5 | Total | | (Rs.) 3300 1000 4300 Value (Rs.) 10000 1000 2000 1500 500 10000 |
| Sr. No. (i) (ii) (F) Sr. No. (i) (iii) (iv) (v) | Item Power Fuel & Water Other Expenses per Month Item Rent Postage & Staionery Telephone Repair & Maintenance Insurance | (Rs.) 5.5 | · | | (Rs.) 3300 1000 4300 Value (Rs.) 10000 1000 2000 1500 500 |
| Sr. No. (i) (ii) (F) Sr. No. (i) (iii) (iv) (v) | Item Power Fuel & Water Other Expenses per Month Item Rent Postage & Staionery Telephone Repair & Maintenance Insurance | (Rs.) 5.5 | Total | | (Rs.) 3300 1000 4300 Value (Rs.) 10000 1000 2000 1500 500 10000 |
| Sr. No. (i) (ii) (F) Sr. No. (i) (iii) (iv) (v) | Item Power Fuel & Water Other Expenses per Month Item Rent Postage & Staionery Telephone Repair & Maintenance Insurance | (Rs.) 5.5 | Total | | (Rs.) 3300 1000 4300 Value (Rs.) 10000 1000 2000 1500 500 10000 |

| (H) (i) (ii) | Total Capital Investment (T.C.I.) Fixed Capital Working Capital for three Months | Total | Value (Rs.) 250,000 2310150 2,560,150 |
|-----------------------------|---|--------|--|
| (a) (i) (ii) (iii) (iv) (v) | Financial Analysis Cost of Production per Annum Raw Materials Staff & Labour Utilities Other Expenses Depreciation on Machinery & equipments@ 10% Interest on Total Capital Investment @ 12% p.a. | | Value (Rs.) 8625000 264000 51600 300000 25000 |
| | Turnavar nar Annum (2) | Total | 9572818 |
| (b) | Turnover per Annum @ Rs.75000 per M.T. 75 for 75 MT | 137000 | 10275000 |
| (c) | Net Profit per Annum Net profit = Total turnover - Total Cost of Production | | 702182 |
| (d) | Profit on turnover | | |
| | Net Profit % Profit = x 100 Total Turnover | 6.83 | % |
| (e) | Rate of Return (ROR) on T.C.I. | | |
| | Net profit ROR = x 100 T.C.I. | 27.43 | % |

(f) Break - Even Analysis

| | Fixed Cost Depreciation on machinery & Equipments | | Value (Rs.) |
|-------|---|-------|----------------|
| (i) | @ 10% Interest on Total Capital | | 25000 |
| (ii) | Investment @ 12% | | 307218 |
| (iii) | 40 % of Salary & Wages | | 105600 |
| (iv) | 40 % of other Expenses | | 120000 |
| | | Total | 557818 |

(g) Break - Even Point (B.E.P.)

Fixed Cost + Profit

NAME & ADDRESSES OF MACHINERY SUPPLIERS:

1. M/s. Unique Enterprises, 201, Konarka Mugdha Apartment, Plot No.36, Saraswati Cooperative Housing Society, Deendayal Nagar, Nagpur - 22. Cont. Person: Dr. Mukund Moholkar

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- 2. M/s. Bhojwani Engineering Works, 74, Old Bagadganj, Gangabai Ghat Chowk, Nagpur.
- 3. M/s. New Rolex Engineering Works, 28 Great Nag Road, Nagpur 440003
- 4. M/s. Suveja Engineers, U-52, MIDC, Hingna, Nagpur 440016. Cont. Person: Shri J.K.Ghagre, Tel.No. (07104)232121 Mb:09403593827, E-mail: suvejaeng@gmail.com

NAME & ADDRESSES OF RAW MATERIAL SUPPLIERS:

- M/s. Surya Chemical Industries, Panjwani Market, Tinnal Chowk, Gandhibagh, Nagpur- 440002. Tel. No.(0712)2767536
 Cont. Person: Shri H.D. Nagpal, Mb. No. 09373107557.
- 2. M/s. Jaysons, 2/22, Earth House, 1ST Floor, Princess Street, Mumbai 400002. Tel. No.(022)22050264, 22060611.
- 3. M/s. Gujrat Paraffins Pvt. Ltd., 909 Embassy Centre Nariman Point, Mumbai. Tel. No.(022)22047593.
- 4. M/s. Bhagat Minerals, Chhota Haripura, P.O. Jasala Flour Mills, Amritsar (Punjab). Tel No.2522020, 2522525.

NAME & ADDRESSES OF PACKING MATERIAL SUPPLIERS:

- M/s. Plasto Containers (India) Pvt. Ltd., J 3, MIDC, Hingna, Nagpur 440016. Cont. Person: Shri Neelesh Agrawal. Tel No. (07104)236672, 236671, Mb: 09373104501
- M/s. Vaibhav Plastimoulds Pvt. Ltd., J 2, MIDC Area, Nagpur – 440016, Cont. Person: Shri Vishal Agrawal Tel. No. (07104)395486, 395487, Mb:09890016601

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