# NAPHTHALENE BALLS

## I. INTRODUCTION

Naphthalene balls are extensively used as household preservative of woolen clothes and as a deodorant tablet for the toilets, urinals, bathrooms etc. These are manufactured from naphthalene flakes by a tablet-making machine having its ball shape die. This industry which requires a little machinery and technical know how can profitably be started on a small scale.

## II. MARKET POTENTIAL

It is a consumable product, hence it finds extensive application in cities. General awareness is improving in cleanliness and hence this product has got good scope for growth.

## III. BASIS AND PRESUMPTIONS

1. Single shift of eight hours a day, 25 days a month and 300 days a year is presumed. Efficient machines and workers are also presumed.
2. Minimum six months period is considered for achieving full capacity utilisation.
3. Labour rates are as per the prevailing rate.
4. The estimates are drawn for a production capacity generally considered techno-economically viable for model type of manufacturing activity.
5. The information supplies are based on a standard type of manufacturing activity viable for model type of manufacturing activity utilising conventional techniques of production at optimum levels of performance.
6. Costs in respect of land and building, machinery, equipment, raw materials and the selling prices of the finished products etc. are those generally prevailing at the time of preparation of the project profiles and may vary depending upon various factors.

Whereas some names of manufacturers, suppliers of machinery and equipment, rawmaterials etc. are indicated at the end of the profile, those are by no means exclusive or are exhaustive.

## IV. IMPLEMENTATION SCHEDULE

Normally three months time is required for the complete implementation of the project, including machinery erection, raw materials procurement etc.

## V. TECHNICAL ASPECTS

### 1.Process Of Manufacturing :

Naphthalene flakes are fed into a jacketed vessel in which temperature is maintained at 88 ° C and an agitator stirs the material. When naphthalene melts, other ingredients like paraffin wax, camphor etc. are added and mixed thoroughly. The liquefied mass is fed into the china ball press or aluminum mould. After cooling the naphthalene balls are taken out and packed.

### 2.Quality Specification :

IS: 589-1974 Naphthalene.

**3.Production Capacity Per Annum**

Quantity 4800 Kg.

Value (Rs.) 3,84,000

**4. Motive Power**

1 HP

## VI. TOTAL CAPITAL INVESTMENTS

| S.No | Description | Value Rs. |
|---|---|---|
| 1 | Fixed Capital | 60000 |
| 2 | Working capital for two months | 52600 |
| | Total cost | 112600 |

## VII. MEANS OF FINANCE

1.Promoter's Contribution (5% of total cost) 5630
2.PMRY subsidy (15% of total cost or Rs.7500,whichever is less) 7500
3.Bank loan[total cost-( Promoter's Contribution+ PMRY subsidy) 99470

## VIII. FINANCIAL ASPECTS

**1. FIXED CAPITAL**

**i)Land & Buildings:** 500sft.Rented premises for a rent of Rs.500 pm.

**ii) Machinery & Equipment**

| S.No | Description | Quantity | Value Rs. |
|---|---|---|---|
| 1 | Naphthalene balls machine with two set dies Hand / power operated | | 35000 |
| 2 | MS jacketed vessels | | 10000 |
| 3 | Heating arrangement - electric/ coal | | 5000 |
| 4 | Storage Tanks | | 8000 |
| 5 | Office furniture, & miscellaneous | | 1000 |
| 6 | Pre-operative expenses | | 1000 |
| | Total | | 60000 |

**2. WORKING CAPITAL**

i)Staff & Labour per month

| S.No | Designation | No | @ Rs. | Value Rs. |
|---|---|---|---|---|
| 1 | Supervisor | 1 | 3000 | 3000 |
| 2 | Semi-skilled worker | 1 | 1500 | 1500 |
| | Total | | | 4500 |

ii) Raw Material (p.m.)

| S.No | Description | Quantity | Value Rs. |
|---|---|---|---|
| 1 | Naphthalene flakes | 1 395 kg | 13800 |
| 2 | Camphor, Phenol, & other chemicals | | 2000 |
| 3 | Packing materials | | 1000 |
| | Total | | 16800 |

iii. Utilities per month

| S.No. | Description | Value Rs. |
|---|---|---|
| 1 | Power | 800 |
| 2 | Water | 200 |
| | Total | 1000 |

iv.Other expenses per month

| S.No | Description | Value Rs. |
|---|---|---|
| 1 | Postage , Stationery, telephone | 2000 |
| 2 | Conveyance, transport misc. | 1500 |
| | Total | 3500 |

v. Total working capital per month

| S.No | Description | Value Rs, |
|---|---|---|
| 1 | Rent | 500 |
| 2 | Staff and labour | 4500 |
| 3 | Raw materials | 16800 |
| 4 | Utilities | 1000 |
| 5 | Other expenses. | 3500 |
| | Total | 26300 |

## IX. COST OF PRODUCTION PER ANNUM

| S.No | Description | Value Rs. |
|---|---|---|
| 1 | Total working capital | 315600 |
| 2 | Depreciation | 6000 |
| 3 | Interest | 16890 |
| | Total | 338490 |

## X. TURNOVER PER YEAR

| S.No | Item | Quantity | Rate Rs. | Value Rs. |
|---|---|---|---|---|
| 1 | Napthalene balls | 4800 kg. | 80 | 384000 |
| | Total | | | 384000 |

## XI. FIXED COST PER YEAR

| S.No | Description | Value Rs. |
|---|---|---|
| 1 | Depreciation | 6000 |
| 2 | Interest | 16890 |
| 3 | Rent | 6000 |
| 4 | 40% of salaries & wages | 21600 |
| 5 | 40% of other expenses (utilities + OE) | 21600 |
| | Total | 72090 |

## XII. PROFIT ANALYSIS

Net Profit : sale-total cost =384000-338490=45510
% of Profit on Sale: Profit / Sale x100=45510/384000]100=11.85%
% of Return on Investment: Profit / (Investment) x 100=45510/112600]100 =40.42%
Break-Even Analysis : FC / (FC+Profit) x100=72090/72090+45510]100 =61.30%

## XIII. MACHINERY SUPPLIERS

1. Universal Tablet Marketing Machinery Mfg., BDD chawl, Worli, Mumbai-18
2. Batliboi & co. silver Jubilee park Road, Bangalore-560002
3. Small Machinery manufacturers, 20, Rajendranath Mukherji Road, Kolkata.

## XIV. RAW MATERIAL SUPPLIERS

- Locally Available