1. INTRODUCTION

Phenyl or Pine cleaners are pine oil emulsion in water. Pine cleaners are very good cleaners having disinfecting and deodorizing properties. White phenyl is finding widespread use and acceptance as hard surface cleaner to remove greasy, fatty and oily soils or various non-porous hard surfaces like floors, bathrooms marbles, ceramics, metals, plastics, concrete, granite, walls, cabinet, appliances etc. White phenyl assist in the removal of dirt and grim and leave all surfaces and atmosphere pleasantly smelling. It is being popular day by day in India in homes, hospitals, clinics, veterinary clinics, restaurants, factories, food establishments, offices, shops, schools, institutions, government departments etc.

2. MARKET DEMAND

Phenyl has several advantages over other similar products and the same are listed below:

1) Pine cleaners are non toxic to human and pets.
2) These cleaners are non-irritating ho human skin, unlike phenol and creosote based black disinfectants.
3) Smell is very pleasant which lingers after use.
4) Do not disolor surfaces.
5) Pine oil is obtained from pine tree therefore the cleaner are herbal and environment friendly.
6) Pine oil has germicidal properties, therefore it is used in hospitals and clinics and pet disinfection.
7) Applicable on a variety of surfaces like glass, metal. Porcelain, enamel, ceramic, plastic, linoleum, stone and concrete etc.
8) It imparts shine to hard surfaces after cleaning.
Phenyl is used in the cleaning of various floor and toilet accessories. This is required to each household, corporate and the agencies involved in the cleaning of city, hospital and other public area like Railway Station and Bus Stands etc. Its demand totally depend upon the status of the city and the households, mean it is more require in city in compression to the rural area.

As per the estimates minimum demand of a district place is around 1000 liters every month, which increases up to 50000 liters per month depending upon the class of the city, even this demand is much higher in metro cities. The above demand only includes the corporate and the households using the product. In addition to above phenyl is also required by Railway, Municipal Corporation and the organization like Sulabh Compex requires about 25-2500 liters per day depending upon the requirement. This mean the demand of phenyl is exists in all area.

3. PRODUCTION TARGETS

Basis of estimation: 300 Working Days in a Year
Single Shift basis
8 hours per shift

<table>
<thead>
<tr>
<th>Phenol</th>
<th>Quantity (Liters)</th>
<th>Value (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100000</td>
<td>2300000</td>
</tr>
</tbody>
</table>

4. MANUFACTURING PROCESS

Firstly take 100 gram Rosin and 100 gram Caster Oil in a container, warm it gently. Similarly in another container take 66 gram NaOH (Caustic Soda) and dissolve it in 200 ml of distilled water. Now caustic soda is tickle down into warm mixture of Rosin and Linseed oil by stirring gently.

It would take 15-20 minutes. Now stand for 45 minutes and maintain the temperature of solution at 80-90°C. Now add with constant stirring, 300 gram creosote oil and 20 gram Monochloro phenol into warm mix of Rosin, Linseed Oil and Caustic Soda. Now add desired quantity of distilled water and warm the mixture with stirring upto 90-100°C for
15-20 minutes. Cool the mixture and it is ready for packing. Different Raw Materials required for different Grades of Phenyl. General composition Hospital grade phenyl is given below:

1. Rosin – 2.50 Kg
2. Groundnut Oil – 2 Kg
3. Caustic Soda – 250 gram
4. Caustic Potash – 250 gram
5. Distilled Water – 7.5 liter
6. Low Creosote Oil – 15 Liter
7. Carbolic Acid – 15 gram
8. Soft Water – 2-4 Liter

5. QUALITY CONTROL STANDARDS

Quality of the product must be as per customers demand and BIS specification.

6. LAND & BUILDING

<table>
<thead>
<tr>
<th>1. Covered area</th>
<th>Sq. Ft.</th>
<th>500</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Uncovered area</td>
<td>Sq. Ft.</td>
<td>500</td>
</tr>
<tr>
<td>3. Total area</td>
<td>Sq. Ft.</td>
<td>1000</td>
</tr>
<tr>
<td>4. Whether constructed or Rented</td>
<td></td>
<td>Rented</td>
</tr>
<tr>
<td>5. If constructed, constructed value</td>
<td>Rs</td>
<td>N.A.</td>
</tr>
<tr>
<td>6. If Rented, Rental value (per month)</td>
<td>Rs</td>
<td>2000</td>
</tr>
</tbody>
</table>

7. MACHINERY AND EQUIPMENT

<table>
<thead>
<tr>
<th>S.N</th>
<th>Description</th>
<th>Qty.</th>
<th>Value (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Mixing Machine</td>
<td>1</td>
<td>230000</td>
</tr>
<tr>
<td>2.</td>
<td>Reaction cattle</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Filling Machine</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
4. Storage vessels 1
5. Hand Tools L.S.
6. Sales Tax, Freight & Insurance etc. 23000

| Total          | 253000 |

---

8. **RAW MATERIAL (PER MONTH)**

<table>
<thead>
<tr>
<th>S.N</th>
<th>Particulars</th>
<th>Quantity</th>
<th>Value (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rosin</td>
<td>800</td>
<td>12000</td>
</tr>
<tr>
<td>2</td>
<td>Caster Oil</td>
<td>800</td>
<td>32000</td>
</tr>
<tr>
<td>3</td>
<td>Creosote Oil</td>
<td>2400</td>
<td>43200</td>
</tr>
<tr>
<td>4</td>
<td>Sodium Hydroxide</td>
<td>500</td>
<td>7500</td>
</tr>
<tr>
<td>5</td>
<td>Monochloro Phenyl</td>
<td>160</td>
<td>5600</td>
</tr>
<tr>
<td>6</td>
<td>Bottles for packaging</td>
<td>L.S.</td>
<td>2000</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>102300</td>
</tr>
</tbody>
</table>

9. **STAFF & LABOUR (PER MONTH)**

<table>
<thead>
<tr>
<th>S.N</th>
<th>Particulars</th>
<th>Qty</th>
<th>Rate</th>
<th>Value (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Administrative and Supervisory</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(i) Manager</td>
<td>1</td>
<td>3000</td>
<td>3000</td>
</tr>
<tr>
<td></td>
<td>(ii) Peon/ Chowkidar</td>
<td>2</td>
<td>2000</td>
<td>4000</td>
</tr>
<tr>
<td>B</td>
<td>Technical (Skilled-Unskilled)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(i) Skilled Worker</td>
<td>2</td>
<td>3000</td>
<td>6000</td>
</tr>
<tr>
<td></td>
<td>(ii) Unskilled Worker</td>
<td>6</td>
<td>2000</td>
<td>12000</td>
</tr>
<tr>
<td></td>
<td>Sub-Total</td>
<td></td>
<td></td>
<td>25000</td>
</tr>
<tr>
<td></td>
<td>Plus perquisites @ 30% of salaries</td>
<td></td>
<td></td>
<td>7500</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td></td>
<td></td>
<td>32500</td>
</tr>
</tbody>
</table>

9. **OTHER EXPENSES (PER MONTH)**

<table>
<thead>
<tr>
<th>S.No</th>
<th>Description</th>
<th>Qty</th>
<th>Value (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rent of Land &amp; Building</td>
<td></td>
<td>2000</td>
</tr>
<tr>
<td>2</td>
<td>Electricity Charges</td>
<td></td>
<td>3000</td>
</tr>
<tr>
<td>3</td>
<td>Fuel Exp.</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>Advertisement &amp; Travelling</td>
<td></td>
<td>2000</td>
</tr>
<tr>
<td>5</td>
<td>Transport</td>
<td></td>
<td>3000</td>
</tr>
<tr>
<td>6</td>
<td>Consumable &amp; stores etc.</td>
<td></td>
<td>2000</td>
</tr>
<tr>
<td>7</td>
<td>Potage expenses/ telephones</td>
<td></td>
<td>1000</td>
</tr>
<tr>
<td>8</td>
<td>Stationery</td>
<td></td>
<td>1000</td>
</tr>
<tr>
<td>9</td>
<td>Repairs &amp; Maintenance’s</td>
<td></td>
<td>2000</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>16000</td>
</tr>
</tbody>
</table>
10. WORKING CAPITAL (FOR ONE MONTH)

<table>
<thead>
<tr>
<th>SL.NO.</th>
<th>DESCRIPTION</th>
<th>AMOUNT(RS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Raw material</td>
<td>102300</td>
</tr>
<tr>
<td>2</td>
<td>Salaries &amp; Wages</td>
<td>32500</td>
</tr>
<tr>
<td>3</td>
<td>Other Expenses</td>
<td>16000</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>150800</td>
</tr>
</tbody>
</table>

11. TOTAL CAPITAL INVESTMENT

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount(RS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building &amp; Other Civil Works</td>
<td>-</td>
</tr>
<tr>
<td>Machinery &amp; Equipment</td>
<td>253000</td>
</tr>
<tr>
<td>Working capital for one month</td>
<td>150800</td>
</tr>
<tr>
<td>Total</td>
<td>403800</td>
</tr>
</tbody>
</table>

12. COST OF PRODUCTION (PER ANNUM)

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount(RS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total recurring cost per year</td>
<td>1809600</td>
</tr>
<tr>
<td>Depreciation on machinery &amp; equipment</td>
<td>25000</td>
</tr>
<tr>
<td>Interest on total investment @ 10%</td>
<td>40000</td>
</tr>
<tr>
<td>Total</td>
<td>1874600</td>
</tr>
</tbody>
</table>

13. SALES PROCEEDS (PER ANNUM)

<table>
<thead>
<tr>
<th>S.N.</th>
<th>Item</th>
<th>Qty(Liters)</th>
<th>Value (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Phenyl</td>
<td>100000</td>
<td>2300000</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>2300000</td>
</tr>
</tbody>
</table>

14. PROFITABILITY (BEFORE INCOME TAX)

<table>
<thead>
<tr>
<th>S.N.</th>
<th>Description</th>
<th>Amount(RS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Annual Gross Profit</td>
<td>425400</td>
</tr>
<tr>
<td>2</td>
<td>% of Profit on Sales</td>
<td>18.50%</td>
</tr>
<tr>
<td>3</td>
<td>Break Even Analysis</td>
<td></td>
</tr>
<tr>
<td>3.1</td>
<td>Annual Fixed Cost</td>
<td>582000</td>
</tr>
<tr>
<td>3.2</td>
<td>Annual Sales</td>
<td>2300000</td>
</tr>
<tr>
<td>3.3</td>
<td>Annual Variable Cost</td>
<td>1227600</td>
</tr>
<tr>
<td>3.4</td>
<td>Break Even Point</td>
<td>54.27%</td>
</tr>
</tbody>
</table>
Break-Even Analysis

(\% of Total Production envisaged)

\[
\frac{\text{Annual fixed cost} \times 100}{\text{Annual sales} - \text{Annual variable costs}} = \% 
\]

15. **Manufacturers/ Suppliers of Machinery**

<table>
<thead>
<tr>
<th></th>
<th>Name</th>
<th>Address</th>
<th>Phone Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bombay Machinery &amp; Tools Syndicate</td>
<td>79, Siyaganj, Indore -452 007</td>
<td>536431, 542067</td>
</tr>
<tr>
<td>2</td>
<td>Jitendra Agencies</td>
<td>5, shivsadan, sardar patel marg, Indore.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Indore machinery stores</td>
<td>40, siyaganj, main road, Indore 452 007</td>
<td>534339</td>
</tr>
<tr>
<td>4</td>
<td>Huma Traders</td>
<td>Infront of shajanabad thana, Shajanabad, Satna(m.p.)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>S.R. Engg. Co.</td>
<td>Jawhar Marg, Indore</td>
<td></td>
</tr>
</tbody>
</table>

16. **Suppliers of Raw Materials**

From Local market of the area.

17. **IMPLEMENTATION PERIOD**

Proposed Project can commence production with in 8-12 weeks after sanction and first disbursement of term loan.
## 18. ASSUMPTION FOR GENERATING PROJECT PROFITABILITY

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Number of Working Days in a year</td>
<td>300 Days</td>
</tr>
<tr>
<td>2</td>
<td>Number of Shifts in a day</td>
<td>1 One</td>
</tr>
<tr>
<td>3</td>
<td>Hours in a Shift</td>
<td>8 hours</td>
</tr>
<tr>
<td>4</td>
<td>Plant Capacity</td>
<td>As per demand of service</td>
</tr>
<tr>
<td>5</td>
<td>Raw material Estimates</td>
<td>Based upon product Mix</td>
</tr>
<tr>
<td>6</td>
<td>Raw Material Availability</td>
<td>All districts of MP</td>
</tr>
<tr>
<td>7</td>
<td>Depreciation</td>
<td>Straight Line Method</td>
</tr>
<tr>
<td>8</td>
<td>Manpower</td>
<td>According to project Requirement</td>
</tr>
<tr>
<td>9</td>
<td>Rent estimate</td>
<td>On the basis of current market prize of the area.</td>
</tr>
<tr>
<td>10</td>
<td>Potential Area of Marketing the products</td>
<td>Household and Hospital demand of the area.</td>
</tr>
<tr>
<td>11</td>
<td>If project is funded, term loan would be</td>
<td>100% of Total investment</td>
</tr>
<tr>
<td>12</td>
<td>Moratorium Period</td>
<td>6-12 months</td>
</tr>
<tr>
<td>13</td>
<td>Repayment Period</td>
<td>5-7 years</td>
</tr>
<tr>
<td>14</td>
<td>Project may be established under</td>
<td>PMEGP (GOI) / Tribal Self Employment Scheme (NSTFDC) or Rani Durgawati Scheme of MP</td>
</tr>
</tbody>
</table>