

PROJECT PROFILE ON PHENOL MANUFACTURING UNIT

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 wide spread 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 discolor 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 Complex 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

	Phenol
Quantity (Liters)	100000
Value (Rs)	2300000

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

1.	Covered area	Sq. Ft.	500
2.	Uncovered area	Sq. Ft.	500
3.	Total area	Sq. Ft.	1000
4.	Whether constructed or Rented		Rented
5.	If constructed, constructed value	Rs	N.A.
6.	If Rented, Rental value (per month)	Rs	2000

7. MACHINERY AND EQUIPMENT

S.N	Description	Qty.	Value (Rs.)
1.	Mixing Machine	1	230000
2.	Reaction cattle	1	
3.	Filling Machine	1	

4.	Storage vessels	1	
5.	Hand Tools	L.S.	
6.	Sales Tax, Freight & Insurance etc.		23000
	Total		253000

8. RAW MATERIAL (PER MONTH)

S.N	Particulars	Quantity	Value (Rs)
1.	Rosin	800.	12000
2.	Caster Oil	800	32000
3.	Creosate Oil	2400	43200
4.	Sodium Hydroxide	500	7500
5.	Monochloro Phenyl	160	5600
6.	Bottles for packaging	L.S.	2000
		Total	102300

9. STAFF & LABOUR (PER MONTH)

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

9. OTHER EXPENSES (PER MONTH)

1.	Rent of Land & Building	2000
2.	Electricity Charges	3000
3.	Fuel Exp.	0
4.	Advertisement & Travelling	2000
5.	Transport	3000
6.	Consumable & stores etc.	2000
7.	Potage expenses/ telephones	1000
8.	Stationery	1000
9.	Repairs & Maintenance's	2000
	Total	16000

10. WORKING CAPITAL (FOR ONE MONTH)

SL.NO.	DESCRIPTION	AMOUNT(RS)
1	Raw material	102300
2	Salaries & Wages	32500
3	Other Expenses	16000
	Total	150800

11. TOTAL CAPITAL INVESTMENT

Building & Other Civil Works	-
Machinery & Equipment	253000
Working capital for one month	150800
Total	403800

12. COST OF PRODUCTION (PER ANNUM)

Total recurring cost per year	1809600
Depreciation on machinery & equipment	25000
Interest on total investment @ 10%	40000
Total	1874600

13. SALES PROCEEDS (PER ANNUM)

S.N.	Item	Qty(Liters)	Value (Rs.)
1.	Phenyl	100000	2300000
	Total		2300000

14. PROFITABILITY (BEFORE INCOME TAX)

1.	Annual Gross Profit	425400
2.	% of Profit on Sales	18.50%
3.	Break Even Analysis	
3.1	Annual Fixed Cost	582000
3.2	Annual Sales	2300000
3.3	Annual Variable Cost	1227600
3.4	Break Even Point	54.27%

Break-Even Analysis

(% of Total Production envisaged)

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

15. Manufactures/ Suppliers of Machinery

1.	Bombay Machinery & Tools Syndicate 79, Siyaganj, Indore -452 007. Ph.- 536431,542067.
2.	Jitendra Agencies 5, shivsadan, sardar patel marg, Indore.
3.	Indore machinery stores 40, siyaganj, main road, Indore 452 007 Ph. 534339
4.	Huma Traders Infront of shajanabad thana, Shajanabad, Satna(m.p.)
5.	S.R. Engg. Co. Jawhar Marg, Indore

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

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