

## **PROJECT PROFILE**

**NAME OF THE PRODUCT: WHITE & BLACK PHENYL  
HAND WASH, ALCOHOLIC HAND  
SANITIZER**

**CAPITAL INVESTMENT: Rs.34,32,500/-**

**MONTH & YEAR  
OF PREPARATION: MAY - 2020**

**PREPARED BY: MSME DEVELOPMNT INSTITUTE  
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## **INTRODUCTION:**

White Phenyl is a deodorant fluid, used in bathrooms, hotels, restaurants for floor cleaning. Black Phenyl is a disinfectant which is used in lavatories, drains and in hospitals to kill micro organisms . Both are prepared from soap solution base. Pine oil is used to prepare white phenyl but light creosote oil, carbolic acid and mono chloro phenol are used to prepare black phenyl. Both the phenyls are emulsion preparations. Carbolic acid and MCP contains phenolic component which imparts necessary germicidal properties. Hand wash and alcoholic hand sanitizer have very good market demand in recent covid virus pandemic situation. The raw material required are liquid detergent, isopropyl alcohol, glycerin, perfume etc. These chemicals are available in chemical market of Kolkata, Mumbai, Raipur.

Drug licence may not be essential for preparation of white phenyl and detergent base hand wash. But it is essential in the case of black phenyl and alcoholic hand sanitizer .

## **MARKET:**

Nowadays, white phenyl is used in every day for cleaning floors of houses, hotels and restaurants. It helps to repel flies and mosquitoes. It also washes dirt due to its soaping action. It provides a pleasant odour and hygienic atmosphere. Black phenyl is applied to counteract, check or kill the disease carrying micro organisms. Mostly it is used in medicals, hospitals, public lavatories. In the present market, the demand of white phenyl is more than black phenyl.

Different brand names like Black Horse, Bull, Doctor, Mr.Clean, Sanitol, etc., have gained popularity in Odisha market and some units are engaged in manufacturing of these items. As the awareness is growing for sanitation in common masses, the use of phenyl will definitely go up and there exists very good scope to set up units in small towns. The demand of hand wash, alcoholic hand sanitizer has been increased manifold in recent spread of covid virus and it becomes a practice now days, The demand of such disinfectant items will increase in future.

**BASIS AND PRESUMPTION:**

1. The scheme is based on single shift (8 hours) duty per day and 300 working days per annum.
2. Minimum wages have been considered in staff and labour payment
3. The rate of interest on total capital investment has been considered as 12%.

**IMPLEMENTATION SCHEDULE:**

- |   |                            |
|---|----------------------------|
| 1. Preparation of profile and regn.with DIC                   | 1 month                    |
| 2. Drug licence from State Drug Controller                    | 2 months                   |
| 3. Availability of finance                                    | 2 months                   |
| 4. Selection of site and procurement of raw materials/equipt. | 1 month                    |
| 5. Recruitment of staff and trial run                         | <u>1 month</u><br>7 months |

**QUALITY SPECIFICATION:**

The Bureau of Indian standards has prescribed IS-1061/1982 specification for Black and white disinfectant fluid. According to this specification Phenyl should stand without separation for a minimum period of 6 months. It should readily dissipate with water to form a thick milky white emulsion on dilution. Creosote Oil is collected from coal tar acids or similar acids derived from petroleum with or without hydrocarbon or any other active ingredients and should not contain quaternary alum compound or mercury salt. The phenyl preparation are graded as follows:

<u>Grade</u>	<u>Dial walker coefficient</u>	<u>Stiphylocal coefficient</u>
1	18	8
2	10	5
3	5	2.5

The minimum phenol co-efficient by DGS&D is for Phenyl.

**APPROX. MOTIVE POWER: 5KW.**

**POLLUTION CONTROL NEEDS:**

Caustic soda and Creosote oil are corrosive in nature. Care should be taken in handling and storage of these items. Such type of unit is not linked

with pollution hazards but no objection certificate from the State Pollution Control Board is required if the unit is to be established.

## **ENERGY CONSERVATION NEED:**

There is not much scope of energy saving in this unit. Timely cleaning of burners, checking of gas kits, will definitely save unnecessary fuel loss. Awareness should be created amongst workers to conserve electrical energy.

## **TECHNICAL ASPECTS:**

### **Process outline of making soap solution:**

The raw materials used for preparation of white phenyl are rosin, non edible oil (like castor oil, linseed oil, polang oil, rice bran oil, etc.) caustic soda, pine oil and any fragrant agent.

Rosin is melted in non edible oil after heating it in a cast iron pan. In another container caustic soda is dissolved in water to prepare a solution of it. Then the aqueous solution of caustic soda is added slowly to the dissolved rosin with continuous stirring. Boiling is suspended when saponification is completed or bran jelly like mass is prepared. After slight cooling extra water is added and stirred thoroughly to get a soap solution. The colour of solution will be yellowish brown. Hot soap solution is used to prepare white or black phenyl.

### **Process of making White Phenyl:**

To the soap solution pine oil is added and the colour will change to white. To it water is added to get desired viscosity. If excess water is added, emulsion will crack and water will separate after cooling. The fragrant agents like citronella is added and packed in pet bottles or glass bottles or tin containers.

### **Process of making Black Phenyl:**

To the hot soap solution light creosote oil is added and stirred. Then water is added as per the composition. The final colour will be black due to presence of creosote oil. Then it is packed in tin containers.

### **Process of making hand wash**

Acid slurry is mixed with caustic soda solution to prepared liquid detergent. The Ph of solution is balanced to 7 or lies between 7 to 8. Then AOS ,sodium sulphate ,urea ,perfume are added and desired thickness is maintained by adding water. Then it is packed in bottle fitted with spraying system.

### Process of making alcoholic hand sanitizer

As per WHO guidelines alcoholic sanitizer is prepared with ethyl alcohol or isopropyl alcohol with more than 70%. Ingredients like glycerin, hydrogen peroxide (3%), distilled water, perfume are added in the ratio 10% to 5% to 13% to 2%. The final product is packed after mixing by a stirrer machine.

### FINANCIAL ASPECTS:

Land 2000 sq.ft with 1000sq.ft Shed.

Own

Store : 1000sq.ft

own

### Machinery & Equipments:

S.no	Item	Qty.	Rate	Value in Rs.
1.	Boiling Kettle 500 Lit.cap. (Hemispherical cast iron)	2	10,000	20,000
2.	Stirrer (s.s)with .25 HP motor	2	50,000	1,00,000
3.	Storage tank (HDPE) 200 lit. cap.	10	3,000	30,000
4.	Gas cylinder (LPG)	2	10,000	20,000
5.	Gas stove	2	2,500	5,000
6.	Screw cap sealing machine	1	10,000	10,000
7.	Crown cork sealing machine	1	10,000	10,000
8.	Weighing scale (platform type)	1	10,000	10,000
9.	Conveyor belt system with vacuum forming and liquid filling machine and automatic cap sealing	1	4,00,000	4,00,000
9.	Buckets, ladles, laboratory equipment. equipt.	LS	-	50,000
10.	Electrification, installation charges	LS	-	50,000
11.	R.O system water purification with capacity 200liters/hours	1.s		2,00,000
				9,05,000

**PRE-OPERATIVE EXPR.**

Preparation of project profile	1,500
Packaging material preparation	30,000
Travel and transport	10,000
Drug license	15,000
Office furniture ,computer printer	50,000
Misc. expenditure	<u>3,500</u>
	1,10,000

Fixed capital Investment = Rs. 9,05,000 + Rs.1,10,000 = Rs.10,15,000/-

**WORKING CAPITAL ANALYSIS:****Staff and labour payment (Per month):**

Manager	1	20,000
Chemist	1	20,000
Skilled labour	4	40,000
Unskilled labour	4	32,000
Salesman	2	<u>30,000</u>
		Rs. 1,42,000

**Raw material to prepare 10,000 litre White phenyl (P.M.):**

S.no.	Item	Qty./rate	Value in Rs.
1.	Acid slurry	120 lit. @ 130/lit.	15,600
2.	Caustic soda	20 kg. @ 50/kg.	1,000
3.	Pine oil	500 lit. @ 180/lit.	90,000
4.	Citronella	10 lit. @ 800/lit.	8,000
5.	Water	LS	-
6.	Bottle with cap, labels and packing material	20,000 @ 8.00/set	1,60,000
			2,74,600

**Raw materials to prepare 30,000 lit. of Black Phenyl:**

S.no	Materials	Qty.	Rate	Value in Rs.
1.	Castor oil	300 lit.	150/lit.	45,000
2.	Rosin	300 kg	175/kg	52,500
3.	Caustic soda	200 kg	50/kg	10,000
4.	Light creosote oil	1200 lit.	60/lit.	72,000
5.	M.C.P	700Lit.	170/lit	1,19,000
5.	Water	15,000 lit.	-	-
6.	Bottle (500ml.cap.) Cartoons, labels	60,000 nos.	8/pc.	4,80,000
				7,78,500

**Raw materials to prepare 5,000 lit. of Hand wash:**

S.no	Materials	Qty.	Rate	Value in Rs.
1.	Acid slurry	600 lit.	150/lit.	90,000
2.	Caustic soda	100 kg	50/kg	5,000
3.	A.O.S	100litrs	60/lit.	6,000
4.	Sodium sulphate	20kg	60/kg	1,200
5.	Urea	10kg	20/kg	200
6.	Water	4,000 lit.	-	-
7.	Perfume	30litrs	800/litr	24,000
8.	Bottle (100ml.cap.) Cartoons, labels	50,000 nos.	8/pc.	4,00,000
				5,26,400

**Raw materials to prepare 5,000 lit. of alcoholic hand sanitizer:**

S.no	Materials	Qty.	Rate	Value in Rs.
1.	Isopropyl alcohol	3,500 lit.	200/lit.	7,000
2.	Glycerin	500litr	150/kg	75,000
4.	Hydrogen peroxide(3%)	250litrs	20/lit.	5,000
5.	R.O water	650litr	-	-
6.	Perfume	100litrs	800/litr	80,000
6.	Bottle (50ml.cap.) Cartoons, labels	1,00,000 nos.	5/pc.	5,00,000
				6,67,000

**Total raw material expenses: Rs1,36,800 +Rs. 4,35,500=Rs. 5,72,300/-**



**UTILITY:**

Gas filling	1cylinder	1,000
Electricity	1000units@7.00	7,000
Water and water treatment		<u>1,000</u>
		Rs. 9,000

**OTHER EXPR. (PER MONTH):**

Advertisement		5,000
Telephone		1,000
Stationery		1,000
Travel		10,000
Maintenance		<u>3,000</u>
		Rs.20,000

**WORKING CAPITAL (PER MONTH):**

$$= \text{Rs.}29,000 + \text{Rs.} 5,72,300 + \text{Rs.}3,000 + \text{Rs}8,000 = \text{Rs.}24,17,500/-$$

**CAPITAL INVESTMENT:**

Fixed capital	Rs.10,15,000
Working capital (1 month)	<u>Rs.24,17,500</u>
	<b>Rs.34,32,500</b>

**Means of finance**

Promoter contribution @25%	Rs. 8,58,125
Bank finance @75%	Rs.25,74,375

**COST OF PRODUCTION (PER ANNUM):**

Depreciation on machinery and equipt. @ 10%	90,500
Depreciation on office furniture @ 20%	10,000
Total recurring expenses	2,90,10,000
Interest on bank loan. @ 12%	<u>3,08,925</u>
	Rs. 2,94,19,425

**TURNOVER (PER ANNUM):**

White phenyl	1,20,000 Lit. @ 25/lit.	Rs. 30,00,000
Black phenyl	3,60,000 lit. @ 27/lit.	Rs. 97,20,000
Hand wash	60,000lit@140/litr	Rs. 84,00,000
Alcoholic sanitizer	60,000lit@ 160/litrs	<u>Rs. 96,00,000</u>
		Rs.3,07,20,000/-

Profit = Turnover - Cost of production

= Rs. 13,00,575/-

Net Profit ratio:  $\frac{\text{Profit} \times 100}{\text{Turnover}} = 4\%$

Rate of Return:  $\frac{\text{Profit} \times 100}{\text{Investment}} = 38\%$

**BREAK EVEN ANALYSIS:****Fixed cost:**

Depreciation on machinery and equipt. @ 10%	90,500
Depreciation on office furniture @ 20%	10,000
Interest on bank loan. @ 12%	3,08,925
40% salary & wages	6,81,600
40% other expr.	<u>96,000</u>
	Rs.11,87,025/-

**BREAK EVEN POINT**

$\frac{\text{Fixed cost} \times 100}{\text{Fixed cost} + \text{Profit}} = 48\%$

## **ADDRESSES OF MACHINERY AND EQUIPMENT:**

Address of Raw material suppliers:

1. M/s. Sun Temple International ,C/o-P.K.Badapanda ,Khan Nagar Nua sahi ,Link Road Santosh Petrol Pump Lane ,Cuttack-753012 ,9437356700 ,9861810015 ,Tel-0671-2367123

{Dealls in ( all type of Acid ,Chemicals ,Solvent ,perfume,Essence ,Colour )

Specialise : Raw material & chemicals for MAKING:-ATAR .AGARBATI,LIQUID BLUE (Ujala type) ,LIQUID ACID (Harpic type) ,HAND WASH ,SOAP,DETERGENT ,ROOM FRESHNER ,PHYNYLE Cosmetic Chemical, CHALK/CANDLE MOULD .all type of SPRAYERS INCLUDING PACKING MATERIAL ETC.)

- 1) M/s. Sony Purfumary Works, C/o. Sri P.K. Nayak, Near Santha Nirankari Sathsangha Bhawan, Rajendra Nagar, Madhupatna, Cuttack. Tel-641442
- 2) M/s. Mother India Chemicals, Near Durga Mandap, Khapuria. Tel-644491
- 3) M/s. R.K. Trading , Bakharabad, Cuttack-2, Tel-622021

### **Rolled Stick:**

M/S. bajaranga Darshan-100 , Saroj kumar Khuntia, kandarpur , -2802386 , Cell- 9861064491

M/s. Patnaik Traders, Dakbangala Chhak, Jajpur Road, Dist.Jajpur. Tel-(06726)-21191

### **For Printing Packets:**

- 1) M/s. East Coast Polyflex (P) Ltd., Hotel Roxy Lane, Badambadi, Cuttack. Tel-611922, 611122.
- 2) M/s. Orissa Coating , 6/11 B.J.B. Nagar, Bhubaneswar-14, Tel-(0674)-430151, Factory-583744.

Pet bottles/tin containers:

1. M/s.Sai chem Industries, Madhupatna, Cuttack-751010.
2. M/s.Chauhan Brothers, Jayshree Cinema Backside, Badambadi, Cuttack. Tel. 318644.
3. Essence & Bottle Supply (India) Pvt.Ltd., P.O.Box : 372, 14, Radha bazar Street, Calcutta-700001. Tel.2254994.

### **For chemicals:**

1. R.K.Trading Co., At.Sunshine Ground, Bakhrabad, Cuttack-753002. Tel. 622021.
2. Mother India Chemicals, Khapuria Ind.Estate, Cuttack-753010. Tel.344491.
3. National Tar Products, Dr.H.Ishaq Road, Calcutta.
4. M/s.Rajapura Rosin Factory, Rajapura, Punjab.
5. M/s.Jayshree Chemicals, Ganjam, Orissa.

### **Cartoons:**

1. Shree Jagannath Packers, Ind.Estate, Madhupatna, Cuttack. Tel.641845 Fax: 0671-643945
2. Kalinga Packers, New Industrial Estate, Jagatpur, Cuttack.
3. Jayadurga Packers, New Ind.Estate, Jagatpur, Cuttack.