

Govt. of India
Ministry of MSME

Project Profile on

HAND SANITIZER

Quality standards: As per IS 1061:2017 and IS: 4117 2008

Production Capacity: 600000 pcs per Annum.

Year of Preparation: 2019-2020

Prepared By

**ELECTRICAL DIVISION
MICRO, SMALL & MEDIUM ENTERPRISES DEVELOPMENT
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1. **INTRODUCTION-** Hand Sanitizer is alcohol based liquid which is used for cleaning the hands to maintain the personal hygiene and to decrease the risk of infectious disease by killing germs present on the hands. It typically comes in the liquid, gel or in foam form and recommended to use when soap and water is not available to wash the hands.. Hand sanitizer is now being used on a daily basis in all Public Places to Disinfect the hands.

2. **MARKET POTENTIAL-** During the COVID 19 the use of Hand sanitizer has become mandatory in offices, railway stations, Airports and all such Public Places. Hand sanitizer is an antiseptic disinfectant available in the form of liquid or gel. Therefore Hand Sanitizer is now a regularly used item and it has a good market prospect.

3. **Basis and presumptions**
 - (i) The basis for calculation of production capacity has been taken on single shift basis on 75% efficiency.
 - (ii) The maximum capacity utilisation on single shift basis for 300 days a year. During first year and second year of operations the capacity utilisation is 60% and 80% respectively. The unit is expected to achieve full capacity utilisation from the third year onward.
 - (iii) The salaries and wages, cost of raw materials, utilities, rent etc are based on the prevailing rates in and around Patna. These cost factors are likely to vary with time and location.
 - (iv) Interest on term loan and working capital loan must be preferably current rate. Otherwise the rate of interest on an average may be taken as 13%. This rate may vary depending upon the policy of the financial institution/agencies from time to time.
 - (v) The cost of machinery and equipment refer to a particular make/model and prices are approximate.
 - (vi) The breakeven point percentage indicated is of full capacity utilisation.
 - (vii) The project preparation cost etc whenever required could be considered under preoperative expenses.

- (viii) The essential production machinery and test equipments required for the projects have been indicated. The unit may utilize common test facilities available at ETDC and ERTLs and Regional Testing Centre (RTC).

Implementation Schedule

The major activities in the implementation of the Project have been listed and the average time for implementation of the Project is estimated at 12 months:

<u>Name of activity</u>	<u>Period in months</u>
<u>(suggestive)</u>	
1. Preparation of Project Report	1
2. UAM (Udyog Aadhar Memorandum & other formalities)	1
3. Sanction of loan by financial institution & Licensing	6 months
4. Plant and machinery	
(a) Placement of order	1
(b) Procurement	2
(c) Installation /erection of machinery/test equipments	2
5. Procurement of raw material	2
6. Recruitment of technical person etc	2
7. Trial production	11 th month
8. Commercial production	12 th month

Note

- Many of the above activities shall be initiated concurrently.
- Procurement of raw materials commences from 8th month onwards.
- When imported plant and machinery are required the implementation period of projects may vary from 12 months to 15 months.

Technical aspect

Process of Manufacturing; Generally the hand sanitizer Production line has Hand sanitizer mixer, Mixing preparation pot , working platform, control panel and essential pipes, valves and filter.

Out of all components the hand sanitizer pot is the most important device in the hand sanitizer production line.. it consists inner container, outer insulation layre, steam and cooling water, temperature measuring device, upper sapped adjustable mixing device and material feeding and discharging device.

The inner container and aquiter are made of high quality stainless steel..

Quality controls & Standards: As per IS 1061:2017 and IS:4117,2008

Production Capacity (Per annum): 600000 bottles 100ml per annum

4. Motive power

10kw

5. Pollution control

The Govt. Accords utmost importance to control environmental pollution. The Small- Scale entrepreneur should have an environmental friendly attitude and adopt pollution control measures by process modification and technology substitutions.

India having acceded to the Montreal Protocol in sept.1992,the production and use of Ozone depleting substances (ODS) like Chlorofluore Carbon (CFCs), carbon tetrachloride, halons and methyl Chloroform etc. Need to be phased out immediately with alternative chemicals/solvents. A notification for detailed rules to regulate ODS phase out under the Environment Protection Act 1986 have been put in place with effect from 19th July 2000.

The following steps are suggested which may help to control pollution in electronics industry wherever applicable:

- i) In electronic industry fumes and gases are released during hand soldering/wave soldering/dip soldering, which are harmful to people as well as environmental and the end products. Alternative technologies may be used to phase-out the existing polluting technologies. Numerous new fluxes have been developed containing 2-10% solids as apposed to the traditional 15-35 % solids.
- ii) Electronic industry uses CFCs,carbon tetrachloride and Methyl chloroform for cleaning of printed Circiut boards after assembly to remove flux residues left after soldering and various kinds of foams for packaging.

Many alternative solvents could replace CFC-113 and methyl chloroform in electronics cleaning. Other chlorinated convents such as trichloroethylene,per chloroethylene and methylene chloride have been used an effective cleaners in electronic industry for many years. Other organic solvents such as Ketenes and Alcolols are effective in removing both solder fluxes and many polar contaminants.

6.Energy conservation

With the growing energy needs and shortage coupled with rising energy cost, a greater thrust in energy efficiency in industrial sector has been given by Govt. of India since 1980s. The energy Conservation Act 2001 has been enacted on 18th August 2001which provides for efficient use of energy its conservation and capacity building of Bureau of Energy Efficiency created under the act.

The following steps may be help for conservation of Electrical Energy:

- i) Adoption of energy conserving technology, production aids and testing facilities.
- ii) Efficient management of process/manufacturing machineries and systems, QC and testing equipments for yielding maximum energy conservation.
- iii) Optimum use of electrical energy for heating during soldering process can be obtained by using efficient temperature controlled soldering and desoldering stations.
- iv) Periodical maintenance of motors compressors etc
- v) Use of power factor correction capacitors, proper selection and layout of lighting systems timely switching on/off of the lights, use of Compact Fluorescent Lamps wherever possible.

FINANCIAL ASPECT

(I) Land and building

Built up Area	6000 sq. ft.
Office, Store	1000 sq. ft.
Assembly and Testing	4000 sq. ft.
Rent payable Per Annum	960,000

(ii) Machinery and equipment

Sn	Description	Ind/imp	Qty	Value (RS.)
1	Sanitizer Assembly line With Raw material Tank,Mixing Tank, Pipeline fittings, pumps , filter with Control Panel	Indian	01	1200000
2	Miscellaneous items			50,000

Total = 1250000

Other Fixed Assets in (RS.)

Electrification charges@10%of cost of machinery and equipment	125000
Office equipment, furniture and working	10,000

table etc	
Tools, jigs and fixtures	10,000
Pre operative expenses	50,000
Misc.	20,000
Total	215000

Total Fixed Capital = 1250000+215000=1465000

Working Capital Per Month

i) Staff & Labour

SN	Description	No of Persons	Salary/month (RS.)	Total Salary per month (RS.)
1	Supervisor Cum Manager, (Part time)	1	6,000	6,000
2	Skilled Worker	2	5,000	10,000

Total = 16000

Note: The unit may engage Skilled Worker on Piece rate basis as required.

ii) Raw Material Requirement Per Month for 15W Street Light

SN	Description	Qty	Rate	Value (Rs.)
1	ISOPROPHYL ALCOHOL	3000 LITRE	300	900000
2	ALOVERA GEL	1000 LITRE	200	200000
3	TEA TREE OIL	50 LITRE	1000	50000
4	ESSENTIAL OIL	50 LITRE	300	15000
5	GLYCERINE	50 LITRE	300	15000
7	VITAMIN E OIL	50 LITRE	300	15000
8	Packaging Material	Lump Sum		5,000

Total= 1200000

iii) Utilities Per Month

Value in (RS.)

Power	10000
Water	1000

Total= 11000

iV)Other Contingent Expenditure Per Month

SN	Item	Amount (RS.)
1	Rent	5000
2	Postage and stationary	500

3	Telephone/fax	1000
4	Repair & Maintenance	2000
5	Transport and Conveyance charges	1000
6	Adv. And publicity	1000
7	Insurance and Taxes	5000
8	Miscellaneous expenditure	4000

Total= 19500

Total Recurring Expenditure Per Month (I+ii+iii+iv)= 1230500

Total Capital Investment (In RS.)

Fixed capital	1465000
Working capital for three month	3691500

Total= 5156500

Financial analysis

Cost of production per annum

Total recurring expenditure	14766000
Depreciation on machinery and equipment@ 10%	146500
Depreciation on tools, jigs and fixtures @ 25%	INCLUDED
Depreciation on office equipments, furniture @ 20%	INCLUDED
Interest on total Capital investment @ 13%	462085

Total= 15374585

Turn over per annum

Item	Qty (Nos)	Rate/unit	Total value (Rs.)
Hand sanitizer 100ml	600000	40	24000000

Profit per annum (before Taxes)= Turn over per annum- Cost of Production per annum = 24000000-15374585=8625415

Net profit ratio= profit/annum*100/sales/annum = 8625415/24000000=33.93%

Rate of Return = Profit/annum*100/ Total Capital Investment = 167%

Break-even Point

Fixed cost per annum

Rent	96000
Depreciation on machinery and	293000

equipment @ 10%	
Depreciation on tools, jigs and fixtures @ 25%	included
Depreciation on office equipment, furniture @ 20%	included
Interest on total capital investment@13%	462085
Insurance	400000
40% of salaries and wages	153600
40% of other contingents & utilities (excluding rent & insurance)	500000
Total fixed cost	1904685

Break even point = fixed cost *100/ fixed cost +Profit
= 1904685X100/10530100=18%

Additional information

- ❖ The Project Profile may be modified/tailored to suit the individual entrepreneurship qualities/capacity, production programme and also suit the location characteristics, wherever applicable.
- ❖ The margin money recommended is 25 % of the working capital requirement at an average. However, the percentage of margin money may vary as per bank's discretion

Name & address of Machinery and equipment supplier

1. Shree Bhagwati Machtech (India) Pvt. Ltd.

Plot No.2802, road no.4I, Near Ramal Cross Roads , GIDC , Phase -4 Vatna
Opposite Winflex Ltd., Gujrat-382445, Email : sales@bhagwatipharma.com

2. Om RO Systems, B-104, Sector 10, Noida, Email ; Omaxro@yahoo.co.in

Name & address of raw Material Suppliers

Note: Raw Materials and Machinery are also available at local Suppliers of Delhi & Patna Region.