



PROJECT PROFILE ON DETERGENT POWDER

Product Name	Detergent Powder
Product Specification	As Per IS-4955-1982
Production Capacity Per Annum	242 M.T
Value In Rs Per Annum	111.32 Lacs
Month & Year of Preparation	June-2020
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INTRODUCTION:-

During Covid-19 pandemic sanitation has become very essential for each and everyone and detergents plays an important role in cleaning and sanitation . Therefore Now-a-days detergents have become a basic need of Public like food and other basic requirements because detergents is to be used in each and every family everyday as a low cost house hold cleansing agent. In the state like Haryana the consumption of Detergents in rural as well as in urban area is increasing day by day Therefore there is a very good and bright scope for manufacture and supply of Detergent Powder Industries in the state. As this product may be manufacture with a very low investment and minimum manpower.

The synthetic Detergents have been developed in the beginning of 20th Centaury . Earlier served by washing compound i.e. soap made traditionally from oils / fat and caustic Soda. Since soap have comparatively lesser washing characteristic in hard water than synthetic detergents, synthetic washing compounds have been able to occupy a significant market which was enjoyed earlier by washing soaps . The term detergent originated from Latin word detergine(i.e wipe off.) is nowadays applied to all synthetic washing compounds. The synthetic detergents not only used as a household cleaning material but also have industrial applications in textiles, pesticide industry as a carrier replaced by washing soap earlier. The water of some regions in india is comparatively hard with high contents of Iron and other heavy minerals. Thus for getting ultra whitening to the clothes detergents can play a vital role in cleansing the clothes and setting up a profitable venture for self employment in the region.

MARKET:-

As detergents are common cleansing products to be used by each and every family everyday .In the state like Haryana the manufacturer of Detergents are less . Therefore looking to the more demand and less production in the region this type venture may became a profitable industries. According to the demand of the detergents this items are to be manufactured at very high level / large quantity to fulfill the requirement of local population. Marketing is an important area of management in an enterprise, It is a comprehensive term and included all resources and economic activities necessary to direct the flow of manufactured goods from producers to consumers. The old concept of marketing was product oriented but now it is customer oriented. Customers are always champion whose need ,taste, purchasing power etc are the guiding factors for

products sale. So it is mandatory to choose the market segment first and make the products as per customer requirement/ specification. For fulfilling the requirement of each and every section of the society we have to prepare the products of different grades as per paying capacity of the customer and to fulfill the requirement of each section cost wise and quality wise.

Presently low cost detergents are becoming very popular on market scene. These detergents have now penetrated in the rural areas substantially and are available in every nook and corner of the country. Synthetic detergents are more efficient washing material than conventional soaps. With the rise in the standard of living and changing market structure for detergents demand explosion in the fabric washing is quite likely. The increased demand of detergent powder is likely to be shared by both organized and small scale Sector. Beside domestic sale in the state and adjoining states of the state Govt. organizations are also very big buyers of the products . As there are large numbers of Border Security Forces, Central reserve Police Forces and other Govt. Department are also ready to buy the products from local manufacturers . Therefore interested manufacturer may also supply the products to Govt. Organizations to enhance the sale of the enterprises. Sanitation and cleansing of clothes during pandemic is very essential it kill germs and protect spreading of infections .

IMPLEMENTATION SCHEDULE:

Project Implementation will take approx four to six month from the date of approval of scheme, However breakup of activities are given as under. More than one activities can be run simultaneously-

S.No	Name of the Activity	Proposed Time
1.	Market Survey and preparation of Project Profile	One Month
2.	MSME registration from Concerned DCIC	Two Weeks
3.	Finance /Loan approval from financial institutions/ Bankers	Two Months
4.	Power connection and Construction of Building	Four Months
5.	Machinery Procurement and Trial Run	One Months
6.	Recruitment of Staff & Labour	Two Weeks
7	Trial Run and actual production	Two Weeks

BASIS AND PRESUMPTIONS :-

The project has been drafted taking into account of the following aspects:-

1.	No. Of Working Days in a Day	One
2.	Duration of the Shift in a day	Hours
3.	Number of Working Days in a Year	300 Days
4.	Working Efficiency of the Unit	75%

5. Construction of Building will be as per the requirement of Manufacturing Activity
6. The estimates are drawn from a production capacity generally considered techno economically viable for a modern type of manufacturing unit.
7. The quality Standard must be followed as per specification
8. The wages of staff and labour is taken as per the prevailing labour wages in the market.
9. The rate of Interest will be as per prevailing in the market
10. Plant and Machinery , Testing Equipments & all other equipments used in manufacturing such type of products may also be employed in manufacturing all other similar type products.
11. Although Unit is free from Pollution and effluent discharge but still provision of exhaust fan may ensure the fresh environment.
12. In case of non availability of fund for construction of building such type of enterprises may be start in rented building also.

MANUFACTURING PROCESS :-

Main steps involved in manufacture of Detergent Powders are-

1. Neutralization of Acid slurry followed by its absorption with dry powders , Builders and finally drying of mixture.
2. Neutralization of acid slurry followed by dissolving the neutralized slurry and builders in water and spray drying
3. Simultaneous neutralization of acid slurry by soda ash and absorption by builders followed by drying.
4. Manufacture of formulated products by mixing of concentrated active detergent powder and builders.

The process more common in small scale and even in medium scale industries is as follow-

The required soda ash (Usually more than 60%) as per the formulation is heaped on floor itself .The required dosage of acid slurry as per formulation is added on the top of the heap and mixing is done.

The colour is added in slurry itself, this followed by addition of , T.S.P, C.M.C. Tinopal, optical brightener and perfume and other additives. The above mixed material is then sieved in sieves made of G.I. wire mesh placed at 3" height over stand made of wooden construction. The material is put on sieve and spread on the entire surface of the mesh.

The sieved material is then packed in polythene bags as per requirement of buyers by sealing or stapling . These packed polythene packets are put in bags to make large packing.

In the power operated process for making high volume of detergent powder ,the required Soda Ash and other formulated ingredients are added in the blender and mixing is started by switching on the motor.

Acid slurry is slowly added through the opening the lid of the blender . As the neutralization of the acid slurry and soda ash progresses ,the mass becomes brownish in colour and subsequently yellowish, At this point slight water is added so that mass becomes nearly white to complete the reaction of the chemical ingredients.

Alternatively Sodium Hypo chlorite solution may also be added as a bleaching agent which will make the product brighter and whiter (for White Clothes),

required colour is then added , followed by other ingredients .properly mixed, sieved and packed in bags as per requirement of market. For Better marketing the product may be packed in pouches of various weights and price s, so that we can reach to the every segment of the society.

FINANCIAL OUTLAY

(A) Fixed Capital Investment

LAND AND BUILDING:

Land- 400 Sq Meters @ 5000/ per sq. meter- = **Rs.20.0 Lakhs**

Building- Covered Area= = 333 sq meters should be in following manners

1	Manufacturing Shed for manufacture of Detergent Powder 10 x 10 sq Mtrs	100 Sq Mtrs
2.	Raw material storage section 8 x8 sq mtrs	64 Sq mtrs
3.	Finished Product Storage Room 8 x8 sq Mtrs	64 Sq mtrs
4.	Office 10 x 8 sq mtrs	80 Sq Mtrs
5.	Utilities 5 x5 sq Mtrs	25 Sq mtrs
TOTAL COVERED AREA-		333 Sq Meters

Construction Value of 333 Sq Meters @ 3500/- Per Sq Mtrs =11.65 Lacs

Total Cost Of Land and Building= Rs. 20.00 +11,65 = **Rs . 31.65 Lacs**

It is advisable to purchase land in out skirt of city where rates are comparatively less compare to main city.-

S.No	Description Of M/c	Qty	Value (Rs)
1	M.S Mass Mixer with ribbon blender with 7.5 H.P Motor Cap ½ Ton with discharging arrangement	1	175000
2	Vibrating Screen for filtration of mass attached with motor	1	60000
3	Digital Weighing Machine	1	20000
4	Sealing and Packing Machine	1	7000

5	Lab. Equipments		10000
6	Pollution Control Equipments		10000
7	Weight & Other utensils		25000
8	Misc. Equipments		5000
9	Erection and electrification @10%		31200
		TOTAL Rs.	343200

Furniture, Fixture , Almirah , Computer etc

=Rs 75000/-

TOATAL FIXED CAPITAL INVESTMENT = Rs. 20 .0 +11.65 + 3. 43+0.75

=Rs 35.83 Lacs

(B) WORKING CAPITAL

Raw Material (P.M)

S.No	Name of the Raw Material	Qty (Kg)	Rate (Rs)Per M.T	Value (Rs) (In Lacs)
1	Acid Slurry	2500	90,000	2.25
2	Soda Ash	10,000	26,000	2.60
3	Sodium Sulphate	2000	28,000	0.56
4	Tri Sodium Phosphate	500	30,000	0.15
5	C.M.C	100	90,000	0.09
6	Soap Stone/ Additives	5000	15,000	0.75
7	Tinopal	100	100,000	0.10
8	Enzymes/ Blutons/optical brightner	10	1000000	0.10
9	Colours	1	25,0000	0.03
10	Perfume	1	25,0000	0.03
11	Packaging Expenses			0.50
		20,212	TOTAL Rs.	7,16000

STAFF AND LABOUR (Per Month):

S.No	Designation	No.	Salary	Amount(Rs)
1	Manager Cum Chemist	1	Self	Self
2	Skilled Worker	2	5000	10,000
3	Unskilled Worker	2	4000	8,000
4	Sales executive	1	5000	5,000
6	Peon -Cum-Chowkidar	1	3000	3,000
			TOTAL	Rs.26,000/-

OTHER EXPENSES (Per Month):

S.No	Activity	Amount (Rs)
1	Electricity Charges	10000
2	Water	1000
3	Postage & Stationery	500
4	Maintenance & Repair	500
5	Advertisement & Publicity	500
6	Insurance	250
7	Transportation	6000
8	Misc Expenses	500
	TOTAL Rs.	19250

Total Working Capital Per Month = Rs7.16 + 0.26 + 0.19= **Rs 7.61/- lacs**
Working Capital for three Month =Rs 7.61 x 3 = **Rs.22.83 Lacs**
Total Capital Investment = Rs 22,83 + 35.83 = **Rs.58.66 Lacs**

Cost Of Production (P.A.):

S.No	Description	Amount (Rs. In lacs)
1	Total Recurring Expenses	91.32
2	Depreciation on Building @ 5%	0.60
3	Depreciation on Machinery and Equipments @ 10%	0.35
4	Depreciation on Furniture and Fixtures @ 20%	0.15
5	Interest On total Capital Investment @ 10% P.A	5.86
	TOTAL Rs.	98.28

Turn Over by Sale of 242 M.T Detergent Powder @ 46000/- P.M.T

= Rs 111.32 Lacs

Net Profit = Rs 111.32 – 98.28 = Rs 13.04 Lacs

Percentage Profit on Sale $\frac{13.04 \times 100}{111.32} = 12\%$

Percentage Profit Total Capital Inv. = $\frac{13.04 \times 100}{58.66} = 22\%$

Break Even Point :

Fixed Cost-

S.No	Description	Amount (Rs. In Lacs)
1	40% of Staff and labour	1.24
2	40% of Other Expenses	0.93
3	Total Depreciation	1.10
4	Interest On Total capital Investment	5.86
	Total :	9.13

B.E.P = $\frac{9.13 \times 100}{9.13 + 13.04} = 41.2\%$

9.13 + 13.04

Addresses of Machinery and equipment Suppliers-

1	Excel Plants & Equipment Pvt Ltd Gate No.611, Mouje Kuruli, chakan M.I.D.C Tal-Khed, Pune - 410501, Maharashtra, India , Phone- 08037429822
	Ess kay lathe Engineers No. 15 B, Shop No. 3, Sneh Nagar, Sapana Sangeeta Main Road, Near Lotus Showroom,, Indore- 452 001, Madhya Pradesh, IndiaAs Phone-8048602461
3	M/s Chemical Metallurgical Design Co.Pvt. Ltd. Shop No.512, Nehru Place, New Delhi, Delhi 110048 Phone: 011 2621 5628
4	S. L. Machinery Khasra No. 38/19, Plot No. 930, Tailles Wali Gali, Near Mundka Industrial Area Metro, Mundka, New Delhi-110041, Delhi Mukesh Yadav (Director)-Call 08042966989

5	M.S. Engineering Works Gautam Nagar, Balanagar, Hyderabad, Telangana 500011 Phone: 080085 30559
6.	<i>The Machinery and equipment may also fabricate from local fabricator as per required shape size and design</i>

Addresses of Raw Material Suppliers/ Dealers :

1	Suvidhi Industries Plot No-572, Shed No C1B/73, 100 Shed Area, GIDC, VAPI, 396195,Gujrat
2	M/s Sarla Chemicals Peonya Industrial Estate Bangalore
3	M/s Chawla Sales Coropration Sadar Bazar, Karnal , Haryana
4	S .K. CHEMICALS Contact Name:-SURESH NAGPAL, PROP 590, TIHAR VILLAGE, MAIN ROAD SUBHASH NAGAR NEW DELHI - 110018 Phone-091-11-2812-6386, 09312246905 E-mail-mail@detergentsindia.com chemindia@hotmail.com Other Website Links-http://www.washingcleaning.com/ http://detergent.web.officelive.com/default.aspx

Soda Ash:-

1	Shri Krishan Enterprises 217, Katra Peran, Tilak Bazar, Delhi - 110 002, Delhi, India
2	Rajnish Chemicals Company 215, 2nd Floor, Vardhman Fashion Mall, Pitam Pura, Delhi-110034, India Vishal Garg (CEO) Call 08048975173
3	M/s Agarwal Chemicals 95/1, GIDC, Estate, Odhav, P.O, Ahemdabad Gujarat
4	M/s Tata Chemicals Mithapur, Gujarat
5	<u>Antares Chem Private Limited</u> Hemang Khetani A-27, First Floor, M. G. Road Ghatkopar East Mumbai - 400077, Maharashtra, India https://www.antareschem.com

6.	Surya Min Chem Plot No-154/920-921. Pooth Khurd Near DSIIIDC Industrial Area Bawana New Delhi1100030 Phone No--8048762264
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C.M.C:-

1	M/s Cellulose Products India Ltd Kathwada Maize products, Ahemdabad
2	M/s Kalpna Chemicals Mecharam, I.F,Mumbai-1

Phosphate Builders:-

1	M/s Star Chemicals Pvt. Limited 21, Noble Chambers, Parsi Bazar fort Mumbai-1
2	M/s Ashok Chemicals Co. 49, New Banara Lane Vadagadi, Mumbai-43
3	M/s D.C.M Chemicals Pvt. Limited P.B. No-1211, Nazabgarh Road , New Delhi
4	M/s Everest Chemicals Industrie, 256, Samuel, St Mumabi-1