



PROJECT PROFILE ON PAINTS

Product Name	PAINTS	
Product Code-	Red Oxide Paints	IS:132-1962
	Red Lead Paint	IS: 102-1962
	Graphite Paint	IS: 126-1962
	Bitumen Based Paints	IS: 341-1973,IS: 158-1981, IS: 9862-1981
	Paste Paints	IS: 86 to 100-1950 IS: 1189-1957
	Aluminum Paints	IS:2339-1963
Production Capacity Per Annum	Red Oxide Paint	65000 litres
	Cement Paint	25000 litres
	Aluminium Paint	10000 litres
	Bitumin Based Paint	10000 litres
Value In Rs Per Annum	Rs. 66.40 Lacs	
Month & Year of Preparation	FEBRUARY -2019	
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1. PRODUCT AND ITS USES :

A wide range of paints has been developed and manufacture to meet the various servicing conditions, methods of application, drying schedule and other performance and economic requirements. Different types of paints such as structural paints and paste paints are used by the public and Govt. Departments/Establishments.

- a) Red Oxide Paints : Red Oxide Paints are used for finishing purpose or as primers to metal surfaces normally. They are based on red oxide (Natural & Synthetic) pigments with suitable varnish or oil medium to impart protection to the surface. In addition to red oxide pigments, Zinc Chrome pigments are also used in some paints where more and strong protection are needed.
- b) Aluminum Paints : Aluminium paints are widely used on metal surfaces. They consist of two components and are packed in dual containers. Paste and the varnish or medium are separately packed and they are mixed only before the application.
- c) Bitumen Based Paints : These include both petroleum and natural asphalts and coal tar or pitch products and their combination or blends with resins. These are widely used for the protection of steel, concrete and wood because of their relatively low cost, excellent resistance to water, chemical interliners, adhesion and high electrical resistivity. These are different types of bituminous coatings but most common is solution of bitumen alone or with combination of resins in solvents.
- d) Paste Paints : These are stiff paints ranging from white to black in colours. The white is most commonly known as 'Safeda' and is used as base material for making paints when mixed with suitable varnish by the painter. Coloured paste are similarly made into coloured paints or used for tinting purpose.

Red Lead paints, wagon black paints and graphite paints structural paints and are not commonly used now.

II. MARKET POTENTIAL :

There has been a phenomenal growth in the paint industry throughout the country and the demand is expected to increase year by year due to all-round development in the industrial sphere and the standards of living of the people. Naturally the demand for setting up units all over the country will also increase. The gap of the reserved paints has to be met invariably by small sector only.

There is substantial demand for paints from the Govt. sector like DGS & D and Central P.W.D., Railway, Defense, State Electricity Board, State Private Sector, Contractors, Architects and Engineers.

III. PRODUCTIN TARGETS (PER YEAR) :

1.	Red Oxide Paint	65000 litres	80/- litre	52,00000
2.	Cement Paint	25000 litres	65/- litre	1625000
3.	Aluminium Paint	10000 litres	60/-litre	600000
4.	Bitumin Based Paint	10000 litres	55/-litre	5500000

IV. BASIS AND PRESUMPTIONS :

- a) This scheme is based on single shift working except for the ball mills which will run overnight for 300 working days per annum.
- b) The estimates are drawn for a production capacity generally considered techno-economically viable of only four paint items which have regular market scope. Other types of paints like Read Lead Paints, Wagon Black Paints, Graphite Paints and other Ready Mixed Paints conforming various Indian Standards can also be manufactured with the facilities provided in the project profile.
- c) The information supplied is based on a standard type of manufacturing activity utilizing conventional techniques of production on optimum levels of performance.
- d) The cost in respect of Land & Building, Machinery and Equipments, raw materials and the selling prices of the finished products etc. are those generally obtaining at the time of the preparation of the project profiles and may vary depending upon various factors.
- e) Whereas some names of manufactures/suppliers of machinery and equipments, raw materials etc. are indicated at end of the profile, these are by no means exclusive or exhaustive.

V. PRODUCTION DETAILS AND PROCESS OF MANUFACTURE :

Paints are composed of the following ingredients i.e (a) Pigments (b) Vehicle (c) Solvents and (d) Additives. The pigments portion consists of genuine pigment with or without pigment extenders. The vehicle is the liquid portion of the paint which includes the pigment binder or film former i.e. resins/oils, volatile solvents and others that are dissolved in the liquid portion.

Solvents like white spirit, Xylene ,toluene, butanol etc. are added to the paint to bring it to the desire consistency.

Additives like wetting discreding agents, antifoaming, anti-skinning agents, plasticizers, driers etc. are added in small percentage to improve the specific property of a paint.

Paints are made on the basis of the above ingredient depending upon the formulation used by individual manufacturers. This is further based on ISI specifications or on the customers specifications.

Red Oxide Paints, Red Lead Paints, Graphite Paints & Wagon Black Paints are mainly manufactured with the help of Ball Mill. All the pigments/pigment extenders and some portion of binder medium with dispersing agents as per formulation are charged in the ball mills and the ball mills are run till the desired grinding/dispersion is achieved. This grinded material is taken out of the ball mill with the help of rest portion of binder medium and solvents. Driers and other required additives are added and paints so prepared is filled in containers after testing of its required properties.

Paste paints are manufactured with the help of Triple Roll Mill & Mixer. The pre-mixing is done in the mixer and grinding/dispersion is done in triple roll mill by passing the pre-mixed material 3 to 4 times through it.

The medium of Aluminium paints and Bituminous paints are manufactured in the varnish kettle by the cooking of the resin and oil or bitumen and thinning with the solvent, i.e. mineral turpentine to desired consistency and solid content. The products are tested for their desired properties and then packed in containers.

VI. QUALITY CONTROL & STANDARDS :

Red Oxide Paints	:	IS:132-1962
Red Lead Paint	:	IS: 102-1962
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Bitumin Based Paints	:	IS: 341-1973,IS: 158-1981, IS: 9862-1981
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Aluminium Paints	:	IS:2339-1963

VII. FINANCIAL ASPECTS :

Land & Building :

Land 500 Sq. metre @ Rs.5000/- Sq.m. = Rs. 25.0 lacs

Building :

Manufacturing Shed 15x15	225 Sq.m.
Raw Material Storage Room 8x8	64 Sq.m
Finished product storage room 8x8	64 Sq.m
Library 5x4	20 Sq.m
Office 5x5	25 Sq.m.
Utilities 2x4	8 Sq.m
Total	406 Sq.m
Construction value of 406 sq mtrs covered area @ Rs.2250/Sq.m=9.13 lacs	
Rest uncovered area may be used for transplantation and future expansion and greenery	

Total cost of Land & Building	25.0+9.13=34.13 lacs
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VIII. MACHINERY & EQUIPMENT :

S.No.	Description	Qty.	Amount(Rs.)
1.	Ball Mill M.S. 750x900mm with 5 HP Motor	1	2.2
2.	Ball Mill M.S. 900X900mm with 10 HP motor	1	2.0
3.	Pot Mill with 2 HP Motor	1	1.25
4.	Triple Roll Mill size 12" x 30" with granite rolls with 5 HP Motor	1	3.5
5.	Varnish Kettle M.S. 500 Litre cap. each with trolley	1	2.60
6.	Digital Electronic balance	1	0.25
7.	Storage Barrals 2000	20 Nos.	3.20
8.	Storage Mixing Tank 1000 litre each	4	1.5
9.	Furnace	2	0.7
10.	Misc. Tools		0.6
11.	Lab equipments		0.8
12.	Furniture & Fixture		0.8
	Erection & electrification @10%		1.94
		Total Rs	21.34Lacs

Total Fixed Capital Investment =34.12 +21.34= 55.46 Lacs

IX.STAFF AND LABOUR (P.M.) :-

S.No.	Description	Qty.	Salary	Total Salary (P.M.)
1.	Personnel Manager-cum-Chemist	1	8,000	8,000
2.	Skilled Worker	2	7000	14000
3.	UN- Skilled Worker	4	6000	24000
4.	Sales Representative	1	8000	8000
5.	Peon-cum-Watchman	1	6000	6000
6.	Perquisites @ 15%		9600	7500
			Total:	67500

X. RAW MATERIAL (P.M.) :

S.No.	Description	Rate (Rs.)/Kg	Qty.(kg.)	Value (Rs.)
1.	Red Oxide Natural	50	5022	251100
2.	China Clay	2.0	800	1600
3.	Baryets	30	1250	37500
4.	Whitening	40	1100	44000
5.	TioZ	200	250	50000

6.	Zinc Oxide White	80	350	28000
7.	Acid Refined Linseed Oil	70	110	770
8.	Linseed Oil Boiled	60	120	720
9.	Stand Oil	45	200	9000
10.	Resin	40	400	16000
11.	Bitumin	40	170	6800
12.	Mineral Turpentine	40	170	6800
13.	Aluminium Paste	50	150	7500
14.	Additives	150	50	7500
15.	Dryers	150	100	15000
16.	Drums 20 L capacity	20	500	10000
17.	Tin Drums 5 L ,4 L, 1 L & other capacity	8	1000	8000
18.	Misc.		3000	3000
			Total :	503290/-

XI. OTHER EXPENSES :

1.	Electricity	10,000
2.	Water	1000
3.	Postage & Stamps	500
4.	Repairing & Maintenance	1000
5.	Adv. & Publicity	500
6.	Transportation	5000
7.	Insurance	500
8.	Misc.	500
	Total :	19,000

Working Capital (P.M.) = 67500 +503290+19000 =Rs.589790/-say 5.90 lacs

Working Capital for 3 months = 5.90 x3 =17.7 lacs

Total Capital Investment : =34.13+17.7 = **Rs. 51.83 Lacs**

XII. COST OF PRODUCTION (P.A.) :

S.No.	Description	Amount (Rs.)in lacs
1.	Total Recurring expenses	70.8
2.	Depreciation on Building @ 5%	0.5
3.	Depreciation on Plant & Machinery @ 10%	2.14
4.	Depreciation on Furniture @ 20%	0.14
5.	Interest on Total Capital Investment @ 10%	5.18
	Total Rs.:	78.76

XIII. TURNOVER :

Description	Qty	Rate / litre	Amount (Rs)
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1.	Red Oxide Paint	70000 litres	80/- litre	56,00000
2.	Cement Paint	25000 litres	75/- litre	1875000
3.	Aluminium Paint	10000 litres	74/-litre	740000
4.	Bitumin Based Paint	10000 litres	75/-litre	750000
5.				Rs.89,65,000/-

Net Profit = 89.65-78.76 = 10.89 Lacs

% Profit on Sale = $10.89 \times 100 / 89.6 = 12.15\%$

% Profit on Total capital Investment = $10.89 \times 100 / 51.83 = 21\%$

VIX. BREAK EVEN POINT :

Fixed Cost :

1.	40% of Staff & Labour	3.20 Lacs
2.	40% of Other Expenses	0.91 Lacs
3.	Total Depreciation on Building, Machinery & Furniture	2.13 Lacs
4.	Interest on Total Capital Investment	5.18 Lacs
	Total :	11.42Lacs

B.E.P. = $\frac{11.42 \times 100}{11.42 + 10.89} = 51\%$

11.42 + 10.89

XV. ADDRESSES OF MACHINERY & EQUIPMENT SUPPLIERS :

1.	M/s Torrance & Sons Ltd. 20 Choringhee Road, Calcutta-16
2.	M/s Kusum Engg. Co. Ltd. 2 Swallow Lane Calcutta.
3.	M/s Sabbarwal Metal Industries, 9-Industrial Estate, Kalpi Road, Kanpur
4.	M/s Poineer Engg. Co., 57 Apollo Street Mumbai-1
5.	M/s National India Engg. Co (P) Ltd., Batawalla Bldg. Hormiman Circle, Fort, Mumbai

XVI. ADDRESSES OF RAW MATERIAL SUPPLIERS :

1.	M/s Allied Trading Co., 39 Nagdevi Street, Mumbai-3
2.	M/s R.N. Shakti & Sons, 27/3, Shakti Nagar Delhi-7
3.	M/s Gandhi Parkeh Investment Corpn. (P) Ltd. Alice Bids., Dr. D.N. Road, Fort, Mumbai-1
4.	M/s Technico Enterprises (P) Ltd., P-22, Swallow Lane, Calcutta-1