

UP MSME 1-Connect

PROJECT REPORT

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PROJECT:

PAINT MANUFACTURING

PROJECT REPORT

Of

PAINT MANUFACTURING

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding **Paint Manufacturing**.

The objective of the pre-feasibility report is primarily to facilitate potential entrepreneurs in project identification for investment and in order to serve his objective; the document covers various aspects of the project concept development, start-up, marketing, finance and management.

[We can modify the project capacity and project cost as per your requirement. We can also prepare project report on any subject as per your requirement.]

State: xxxxxxxxxx

PROJECT AT A GLANCE

1 Name of the Entrepreneur
 2 Constitution (legal Status)
 3 Father / Spouse Name
 4 Unit Address :
 5 Product and By Product
 6 Name of the project / business activity proposed :
 7 Cost of Project : **PAINT**
 8 Means of Finance
 Term Loan
 Own Capital
 Working Capital
 9 Debt Service Coverage Ratio
 10 Pay Back Period
 11 Project Implementation Period
 12 Break Even Point : 2.01
 13 Employment : 5 Years
 14 Power Requirement : 5-6 Months
 15 Major Raw materials : 41%
 16 Estimated Annual Sales Turnover (Max Capacity) : 8 Persons
 17 Detailed Cost of Project & Means of Finance : 20.00 HP
 : Minerals, Chemicals, Binders,Preservatives,Wetting Agents,Pigments
 COST OF PROJECT : 123.19 Lakhs

MEANS OF FINANCE

(Rs. In Lakhs)	
Particulars	Amount
Land	Own/Rented
Building /Shed 1000 Sq ft	3.00
Plant & Machinery	13.00
Furniture & Fixtures	1.00
Working Capital	5.00
Total	22.00
Particulars	Amount
Own Contribution	2.20
Working Capital(Finance)	4.50
Term Loan	15.30
Total	22.00

PAINT MANUFACTURING

Introduction: Paint is any pigmented liquid, liquefiable, or mastic composition that, after application to a substrate in a thin layer, converts to a solid film. It is most commonly used to protect, colour, or provide texture to objects. Paint can be made or purchased in many colours—and in many different types, such as water colour or synthetic. Paint is typically stored, sold, and applied as a liquid, but most types dry into a solid. Most paints are either oil-based or water-based and each have distinct characteristics. Based on their formulation, industrial paints and coatings can be segmented into four categories: water-based, solvent-based, powder, and UV-based.



Uses & Market Potential: Paint is used to protect all sorts of buildings and structures from the effects of water and sun. Wooden buildings such as houses are usually painted because a coat of paint prevents water seeping into the wood and making it rot. The paint also helps to prevent the wood from drying out in the hot sun. Some important uses are as follow:

- Paint is used to protect building from different types of weather.
- It is used to decorate all types of objects.
- It is also used for art & craft activities.
- To improve the beauty of material.
- Helps to make material long lasting.
- Helps in facilitation of cleaning process of surface.

The Indian paint industry has been witnessing a gradual shift in the preferences of people from the traditional whitewash to high quality paints like emulsions and enamel paints, which is providing the basic stability for growth of Indian paint industry. The market for India paints and coatings is expected to expand at a CAGR of 8.56% during the forecast period of 2019 – 2024. Growing demand from the construction industry, coupled with rising infrastructure activities, is driving the demand for the market studied.

Raw materials: Major raw materials are as follows:

1. Minerals
2. Chemicals
3. Binders
4. Preservatives
5. Wetting Agents
6. Pigments

On an average raw material cost per Kg is approx. Rs. 50-55. Value of raw material changes as per the quality.

Machinery Requirements: Basic machines & equipments are as follows:

S N o.	Machine	Unit	Price
1.	Twin shaft High speed Mixer(600 Ltr. Per day)	1	700000
2.	High speed Single shaft stirrer(200 Kg per hr.)	1	50000

3.	Demineralize treatment plant	1	200000
4.	Machinery Cooling plant	1	200000
5.	Water dispenser	1	100000
6.	Other machines & equipments	Ls	50000
	Total Amount		1300000

Manufacturing Process: Paint is mixture of several chemical compounds like Solvent (usually water), Binder, Plasticizers, Fillers and other additives. In most setting a water treatment plant is used to ensure water's physical parameters so as to maintain the quality of paint. The water from appropriate water source is inducted into the water treatment plant which basically consists of filtration array which is essentially a sediment filter setting and a reverse osmosis unit which reduces hardness of water.

The various reagents [Binder(Oils+Resins), Pigments, Fillers and Additives except Drier] to form base paint are supplied to mixer from various reagent tanks, these reagents are weighed one by one in weighing tank which is an integral part of weighing machine and inducted into the operating mixer. The solid reagents are introduced into the weighing tank via Hooper and Feeder arrangement prior to their induction into the mixer. The resultant base paint is then poured into a holding tank which supplies it to Paint Milling Machine which essentially crushes any coagulated solids and crumbs, so as to maintain the viscosity and quality of paint.

This milled paint is held in another holding tank from where it's supplied to another mixer with appropriate stirrer arrangement, initially soft water is introduced followed by which milled paint, thinner and other reagents are introduced into mixing tank one by one. The resultant paint is then held in a screening tank which is essentially used to separate sludge from paint, this paint is then supplied to the filling machine which fills this paint into bottles. The paint filled bottles or cans are then capped and sent to labelling machine which labels these bottles followed by which they are sent for sale.

Area:

The industrial setup requires space for Inventory, workshop or manufacturing area, space for power supply utilities and auxiliary like Generator setup. Also some of the area of building is required for office staff facilities, documentation, office furniture, etc. Thus, the approximate total area required for complete industrial setup is 1500 to 2000Sqft. Civil work will cost Rs 3 Lac. (Approx.)

Power Requirement: The power consumption required to run all the machinery could be approximated as 20hp

Manpower Requirement- There are requirement of skilled machine operators to run the machine set. Experience quality engineers are required for desired quality control. Some helpers are also required to transfer the material from one work station to other. Office staffs are required to maintain the documentation. The approximate manpower required is 8 including 1 Supervisor, 1 Plant operator, 1 unskilled worker, 1 Helper and 1 Security guard. 3 Skilled worker including Accountant, Manager and Sales person.

Bank Term Loan: Rate of Interest is assumed to be at 11%

Depreciation: Depreciation has been calculated as per the Provisions of Income Tax Act, 1961

Approvals & Registration Requirement:

Basic registration required in this project:

- GST Registration
- Udyog Aadhar Registration (Optional)
- Choice of a Brand Name of the product and secure the name with Trademark if require.

- NOC from State Pollution Control Board

Implementation Schedule:

S No.	Activity	Time required
1.	Acquisition of premises	1-2 Months
2.	Procurement & installation of Plant & Machinery	1-2 Months
3.	Arrangement of Finance	1.5-2 Months
4.	Requirement of required Manpower	1 Month
5.	Commercial Trial Runs	1 Month
	Total time Required (some activities shall run concurrently)	5-6 Months

FINANCIALS

<u>PROJECTED CASH FLOW STATEMENT</u>					
PARTICULARS	I	II	III	IV	V
<u>SOURCES OF FUND</u>					
Own Contribution	2.20	-			
Reserve & Surplus	3.63	4.75	5.83	6.70	7.96
Depreciation & Exp. W/off	2.35	2.02	1.73	1.49	1.28
Increase In Cash Credit	4.50				
Increase In Term Loan	15.30	-	-	-	-
Increase in Creditors	2.25	0.32	0.34	0.36	0.38
TOTAL :	30.23	7.09	7.91	8.54	9.62
<u>APPLICATION OF FUND</u>					

Increase in Fixed Assets	17.00	-	-	-	-
Increase in Stock	3.80	0.50	0.52	0.55	0.57
Increase in Debtors	3.92	0.63	0.52	0.54	0.56
Repayment of Term Loan	1.70	3.40	3.40	3.40	3.40
Taxation	-	-	0.58	0.67	0.80
Drawings	1.50	2.00	2.50	3.00	4.00
TOTAL :	27.91	6.53	7.53	8.16	9.32
Opening Cash & Bank Balance	-	2.32	2.89	3.27	3.66
Add : Surplus	2.32	0.57	0.38	0.39	0.30
Closing Cash & Bank Balance	2.32	2.89	3.27	3.66	3.96

<u>PROJECTED BALANCE SHEET</u>					
PARTICULARS	I	II	III	IV	V
<u>SOURCES OF FUND</u>					

Capital Account					
Opening Balance	-	4.33	7.08	9.83	12.86
Add: Additions	2.20	-	-	-	-
Add: Net Profit	3.63	4.75	5.25	6.03	7.17
Less: Drawings	1.50	2.00	2.50	3.00	4.00
Closing Balance	4.33	7.08	9.83	12.86	16.03
CC Limit	4.50	4.50	4.50	4.50	4.50
Term Loan	13.60	10.20	6.80	3.40	-
Sundry Creditors	2.25	2.57	2.92	3.28	3.65
TOTAL :	24.68	24.36	24.05	24.03	24.18
<u>APPLICATION OF FUND</u>					
Fixed Assets (Gross)	17.00	17.00	17.00	17.00	17.00
Gross Dep.	2.35	4.37	6.10	7.59	8.87
Net Fixed Assets	14.65	12.63	10.90	9.41	8.13

Current Assets					
Sundry Debtors	3.92	4.54	5.06	5.60	6.16
Stock in Hand	3.80	4.30	4.82	5.37	5.93
Cash and Bank	2.32	2.89	3.27	3.66	3.96
TOTAL :	24.68	24.36	24.05	24.03	24.18

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PROJECTED PROFITABILITY STATEMENT					
PARTICULARS	I	II	III	IV	V
<u>A) SALES</u>					
Gross Sale	78.30	90.80	101.24	112.03	123.19
Total (A)	78.30	90.80	101.24	112.03	123.19

B) COST OF SALES					
Raw Material Consumed	45.00	51.48	58.32	65.52	73.08
Electricity Expenses	1.61	1.77	1.93	2.10	2.26
Repair & Maintenance	6.66	6.72	7.09	7.84	8.62
Labour & Wages	10.46	11.61	12.42	13.04	13.56
Depreciation	2.35	2.02	1.73	1.49	1.28
Cost of Production	66.08	73.60	81.49	89.99	98.80
Add: Opening Stock /WIP	-	2.30	2.58	2.88	3.18
Less: Closing Stock /WIP	2.30	2.58	2.88	3.18	3.50
Cost of Sales (B)	63.78	73.31	81.20	89.68	98.49
C) GROSS PROFIT (A-B)	14.52	17.49	20.04	22.35	24.70
	18.54%	19.26%	19.79%	19.95%	20.05%
D) Bank Interest (Term Loan)	1.66	1.36	0.98	0.61	0.23
ii) Interest On Working Capital	0.50	0.50	0.50	0.50	0.50
E) Salary to Staff	7.56	9.07	10.70	12.31	13.54
F) Selling & Adm Expenses Exp.	1.17	1.82	2.02	2.24	2.46
TOTAL (D+E)	10.89	12.74	14.21	15.65	16.73
H) NET PROFIT	3.63	4.75	5.83	6.70	7.96

	4.6%	5.2%	5.8%	6.0%	6.5%
I) Taxation	-	-	0.58	0.67	0.80
J) PROFIT (After Tax)	3.63	4.75	5.25	6.03	7.17

COMPUTATION OF MAKING OF PAINT			
Item to be Manufactured Paint			
Manufacturing Capacity per day		600 Ltr	
No. of Working Hour		8	
No of Working Days per month		25	
No. of Working Day per annum		300	

Total Production per Annum		1,80,000	Ltr
Total Production per Annum		1,80,000	Ltr
Year		Capacity	PAINT
		Utilisation	
I		50%	90,000.00
II		55%	99,000.00
III		60%	1,08,000.00
IV		65%	1,17,000.00
V		70%	1,26,000.00
Raw Material Consumed	Capacity	Rate	Amount (Rs.)
	Utilisation		
I	50%	50.00	45.00

II	55%	52.00	51.48
III	60%	54.00	58.32
IV	65%	56.00	65.52
V	70%	58.00	73.08

COMPUTATION OF SALE					
Particulars	I	II	III	IV	V
Op Stock	-	3,000.00	3,300.00	3,600.00	3,900.00
Production	90,000.00	99,000.00	1,08,000.00	1,17,000.00	1,26,000.00
	90,000.00	1,02,000.00	1,11,300.00	1,20,600.00	1,29,900.00
Less : Closing Stock(10 Days)	3,000.00	3,300.00	3,600.00	3,900.00	4,200.00
Net Sale	87,000.00	98,700.00	1,07,700.00	1,16,700.00	1,25,700.00
Sale Price per Ltr.	90.00	92.00	94.00	96.00	98.00

Sale (in Lacs)	78.30	90.80	101.24	112.03	123.19

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL					
PARTICULARS	I	II	III	IV	V
<u>Finished Goods</u>					
(15 Days requirement)	2.30	2.58	2.88	3.18	3.50
<u>Raw Material</u>					
(10 Days requirement)	1.50	1.72	1.94	2.18	2.44
Closing Stock	3.80	4.30	4.82	5.37	5.93
COMPUTATION OF WORKING CAPITAL REQUIREMENT					
Particulars	Amount	Margin(10%)	Net		
			Amount		
Stock in Hand	3.80				

Less:			
Sundry Creditors	2.25		
Paid Stock	1.55	0.15	1.39
Sundry Debtors	3.92	0.39	3.52
Working Capital Requirement			4.91
Margin			0.55
MPBF			4.91
Working Capital Demand			4.50

<u>BREAK UP OF LABOUR</u>				
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Particulars		Wages	No of	Total
		Per Month	Employees	Salary
Supervisor		25,000.00	1	25,000.00
Plant Operator		20,000.00	1	20,000.00
Unskilled Worker		16,000.00	1	16,000.00
Helper		12,000.00	1	12,000.00
Security Guard		10,000.00	1	10,000.00
				83,000.00
Add: 5% Fringe Benefit				4,150.00
Total Labour Cost Per Month				87,150.00
Total Labour Cost for the year (In Rs. Lakhs)			5	10.46

<u>BREAK UP OF SALARY</u>				

Particulars		Salary	No of	Total
		Per Month	Employees	Salary
Manager		25,000.00	1	25,000.00
Accountant cum store keeper		20,000.00	1	20,000.00
Sales		15,000.00	1	15,000.00
Total Salary Per Month				60,000.00
Add: 5% Fringe Benefit				3,000.00
Total Salary for the month				63,000.00
Total Salary for the year (In Rs. L khs)			3	7.56

<u>COMPUTATION OF DEPRECIATION</u>					
Description	Land	Building/shed	Plant & Machinery	Furniture	TOTAL

Rate of Depreciation		10.00%	15.00%	10.00%	
Opening Balance	Leased		-	-	-
Addition	-	3.00	13.00	1.00	17.00
	-	3.00	13.00	1.00	17.00
		-	-	-	
TOTAL		3.00	13.00	1.00	17.00
Less : Depreciation	-	0.30	1.95	0.10	2.35
WDV at end of Ist year	-	2.70	11.05	0.90	14.65
Additions During The Year	-	-	-	-	-
	-	2.70	11.05	0.90	14.65
Less : Depreciation	-	0.27	1.66	0.09	2.02
WDV at end of IIInd Year	-	2.43	9.39	0.81	12.63
Additions During The Year	-	-	-	-	-
	-	2.43	9.39	0.81	12.63
Less : Depreciation	-	0.24	1.41	0.08	1.73
WDV at end of IIIrd year	-	2.19	7.98	0.73	10.90
Additions During The Year	-	-	-	-	-
	-	2.19	7.98	0.73	10.90
Less : Depreciation	-	0.22	1.20	0.07	1.49
WDV at end of IV year	-	1.97	6.79	0.66	9.41

Additions During The Year	-	-	-	-	-
	-	1.97	6.79	0.66	9.41
Less : Depreciation	-	0.20	1.02	0.07	1.28
WDV at end of Vth year	-	1.77	5.77	0.59	8.13

REPAYMENT SCHEDULE OF TERM LOAN						11.0%	
Year	Particulars	Amount	Addition	Total	Interest	Repayment	Cl Balance
I	Opening Balance						
	Ist Quarter	-	15.30	15.30	0.42	-	15.30
	Iind Quarter	15.30	-	15.30	0.42	-	15.30
	IIIrd Quarter	15.30	-	15.30	0.42	0.85	14.45
	Ivth Quarter	14.45	-	14.45	0.40	0.85	13.60
					1.66	1.70	
II	Opening Balance						
	Ist Quarter	13.60	-	13.60	0.37	0.85	12.75
	Iind Quarter	12.75	-	12.75	0.35	0.85	11.90
	IIIrd Quarter	11.90	-	11.90	0.33	0.85	11.05
	Ivth Quarter	11.05		11.05	0.30	0.85	1 0.20
					1.36	3.40	
III	Opening Balance						

	Ist Quarter	10.20	-	10.20	0.28	0.85	9.35
	Iind Quarter	9.35	-	9.35	0.26	0.85	8.50
	IIIrd Quarter	8.50	-	8.50	0.23	0.85	7.65
	Ivth Quarter	7.65		7.65	0.21	0.85	6.80
					0.98	3.40	
IV	Opening Balance						
	Ist Quarter	6.80	-	6.80	0.19	0.85	5.95
	Iind Quarter	5.95	-	5.95	0.16	0.85	5.10
	IIIrd Quarter	5.10	-	5.10	0.14	0.85	4.25
	Ivth Quarter	4.25		4.25	0.12	0.85	3.40
					0.61	3.40	
V	Opening Balance						
	Ist Quarter	3.40	-	3.40	0.09	0.85	2.55
	Iind Quarter	2.55	-	2.55	0.07	0.85	1.70
	IIIrd Quarter	1.70	-	1.70	0.05	0.85	0.85
	Ivth Quarter	0.85		0.85	0.02	0.85	0.00

	Door to Door Period	60	Months				
	Moratorium Period	6	Months				
	Repayment Period	54	Months		0.23	3.40	

<u>CALCULATION OF D.S.C.R</u>					
PARTICULARS	I	II	III	IV	V
<u>CASH ACCRUALS</u>	5.98	6.77	6.98	7.51	8.45
Interest on Term Loan	1.66	1.36	0.98	0.61	0.23
Total	7.64	8.13	7.96	8.12	8.68

REPAYMENT					
Repayment of Term Loan	1.70	3.40	3.40	3.40	3.40
Interest on Term Loan	1.66	1.36	0.98	0.61	0.23
Total	3.36	4.76	4.38	4.01	3.63
DEBT SERVICE COVERAGE RATIO	2.27	1.71	1.82	2.03	2.39
AVERAGE D.S.C.R.			2.01		

<u>COMPUTATION OF ELECTRICITY</u>				
<u>(A) POWER CONNECTION</u>				
Total Working Hour per day		Hours	8	
Electric Load Required		HP	20	
Load Factor			0.7460	
Electricity Charges		per unit	7.50	
Total Working Days			300	
Electricity Charges				2,68,560.00
Add : Minimum Charges (@ 10%)				
<u>(B) DG set</u>				

No. of Working Days			300	days
No of Working Hours			0.3	Hour per day
Total no of Hour			90	
Diesel Consumption per Hour			8	
Total Consumption of Diesel			720	
Cost of Diesel			65.00	Rs. /Ltr
Total cost of Diesel			0.47	
Add : Lube Cost @15%			0.07	
Total			0.54	
Total cost of Power & Fuel at 100%				3.22
Year		Capacity		Amount
				(in Lacs)
I		50%		1.61

II		55%		1.77
III		60%		1.93
IV		65%		2.10
V		70%		2.26

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