PROJECT REPORT

Of

ACRYLIC PAINT

PURPOSE OF THE DOCUMENT

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

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.]



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	PR	OJEC	T AT A GLANCE		
1	Name of the Entreprenuer		XXXXXXXXXX		
2	Constitution (legal Status)		xxxxxxxxx		
3	Father / Spouse Name		XXXXXXXXXXXX		
4	Unit Address :		****		
1					
				XXXXXXX XXXXXXX Sta XXXXXXX	ate: xxxxxxxxxx
5	Product and By Product	:	ACRYLIC PAINTS		
6	Name of the project / business activity proposed :		ACRYLIC PAINTS MANUFACTURING UN	пт	
7	Cost of Project	:	Rs.21.56 Lakhs		
8	Means of Finance Term Loan Own Capital Working capital		Rs.14.4 Lakhs Rs.2.16 Lakhs Rs.5 Lakhs		
9	Debt Service Coverage Ratio	:	2.57		
10	Pay Back Period	:	5	Years	
11	Project Implementation Period	:	5-6	Months	
12	Break Even Point	:	26%		
13	Employment	:	8	Persons	
14	Power Requirement	:	40.00	HP	
15	Major Raw materials	:	DM Water, Wetting Agent, HEC, Pine Oil,Tita Emulsion,Thickener, Defoamer,Other Preserva		crylic
16	Estimated Annual Sales Turnover (Max Capacity)	:	142.16	Lakhs	
17	Detailed Cost of Project & Means of Finance				
	COST OF PROJECT			(Rs. In Lakhs)	
			Particulars	Amount	
			Land Building / Shed 800 Sq ft	Own/Rented 3.00	
			Plant & Machinery	12.00	
			Furniture & Fixtures Working Capital	1.00 5.56	
			Total	21.56	
	MEANS OF FINANCE		Particulars	Amount	
			Own Contribution	2.16	
			Working Capital(Finance)	5.00	
			Term Loan	14.40	
			Total	21.56	

ACRYLIC PAINTS

Introduction: In the 1940s after the Second World War, the paint manufacturing industry moved away from the old tried and true methods of making linseed oil paint and began heavily promoting chemical, petroleum and solvent based paints. With the awareness of danger of petroleum products in the environment, we are entering a new period for the painting industry. Major difference in modern paint is the change in the binder form the used natural boiled linseed oil to alkyd oil, which is generally derived from Soybean and Safflower oil. Use of synthetic resins, such as acrylics and epoxies, has become prevalent in paint manufacture in the last 30 years. Acrylic resin emulsions in latex paints with water thinner have also become common.



Uses & Market Potential: Acrylic paint is a fast-drying paint made of pigment suspended in acrylic polymer emulsion and plasticizers, silicon oils, defoamers, stabilizers, metal soaps. Acrylic paints are water-soluble, but become water-resistant when dry. Acrylic painters can modify the appearance, hardness, flexibility, texture, and other characteristics of the

paint surface by using acrylic mediums. Acrylics can be used on paper, canvas and a range of other materials. Acrylic paints have good adhesion on difficult substrates. This pure acrylic emulsion paint helps prevent adhesion related failures after a long period of time; blistering, peeling and cracking, and flaking. Also paint discoloration is an undesirable change in the colour of exterior paint. Pure acrylic emulsions ensure to paint a very constant and durable colour for long periods of time. The resistance to chalking and fading of the acrylic paints is much better than any other paint particularly in sunny exposure. Due to above said qualities acrylic paints especially exterior paints are preferably used in place of oil based paints.

Machinery & Equipments : Basic machines & equipments are as follows:

S No.	Machine	Unit	Price
1.	Sand mill fitted with pump, cap. 5 litres shell	2	300000
	size and flow rate of 4 – 5 litres per hour with		
	5 HP motor & starter		
2.	Variable speed High Speed Disperser cap. 15	1	200000
	HP motor with starter.		
3.	Electronic weighing machine	1	20000
4.	Brook field viscometer LCV mode	1	300000
5.	Weight per litre cup 100 ml cap	1	5000
6.	Wet scrubbality tester	1	25000
7.	DM Water Plant cap. 25 litres per hour	2	200000
8.	Water overhead tank of 10,000 liters capacity	1	80000
	and tube well fitted with accessories		
9.	Other machines & equipments		70000
	Total Amount		1200000

<u>Raw material:</u> Major raw materials are as follows:

- 1. DM Water
- 2. Wetting Agent
- 3. HEC
- 4. Pine Oil
- 5. Titanium Dioxide
- 6. China Clay
- 7. Calcite
- 8. Acrylic Emulsion
- 9. Thickener
- 10. Defoamer
- 11. Other Preservatives and emulsifiers

Manufacturing Process: Solution of hydroxy ethyl cellulose (HEC) is made with the help of water and ammonia. All the pigments and extenders are mixed with the small quantity of water and weighting agents with the help of high speed stirrer having the rpm of 1500. The prepared mill base is passed through the sand mill with the flow rate of 3 – 4 litrs per minutes. For light colour mill based is passed once through the sand mill and for dark colour it is passed through twice or thrice depending upon the hardness of pigment. The grinded material is mixed with the remaining water and emulsion at a low rpm with the high speed stirrer. Thickener, coaleasing agents, defoamer, buffer solution are added under slow speed to get the right consistency. Various water based stainers are added to the prepared paint to get the required shade of paint. After preparation and thorough checking of quality parameters the acrylic paint is packed to different small containers. Now it is ready for dispatch at various places.

<u>Area:</u>

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 800 to 1200Sqft. Civil work cost will be around 3 Lac Rs.(Approx.)

<u>Power Requirement</u> – The power consumption required to run all the machinery could be approximated as 40hp

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

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	5-6 Months
	concurrently)	

FINANCIALS

PROJECTED CASH FLOW STATEMENT						
PARTICULARS	I	II	III	IV	v	
SOURCES OF FUND						
Own Contribution	2.16	-				
Reserve & Surplus	4.19	6.60	8.02	11.58	15.29	
Depriciation & Exp. W/off	2.20	1.89	1.62	1.40	1.20	
Increase In Cash Credit	5.00					
Increase In Term Loan	14.40	-	-	-	-	
Increase in Creditors	1.03	0.19	0.13	0.13	0.13	
TOTAL :	28.97	8.68	9.78	13.11	16.62	
APPLICATION OF FUND						
Increase in Fixed Assets	16.00	-	-	-	-	
Increase in Stock	3.91	0.64	0.58	0.60	0.61	
Increase in Debtors	2.78	0.52	0.46	0.48	0.49	
Repayment of Term Loan	1.60	3.20	3.20	3.20	3.20	
Taxation	-	0.66	1.20	3.47	4.59	
Drawings	2.50	3.00	4.00	5.00	7.00	
TOTAL:	26.80	8.03	9.44	12.75	15.89	
Opening Cash & Bank Balance	-	2.17	2.83	3.16	3.52	
Add : Surplus	2.17	0.65	0.33	0.36	0.73	
Closing Cash & Bank Balance	2.17	2.83	3.16	3.52	4.25	

PROJECTED BALANCE SHEET	<u>r</u>				
PARTICULARS	I	п	III	IV	V
SOURCES OF FUND					
Capital Account					
Opening Balance	-	3.85	6.79	9.60	12.71
Add: Additions	2.16	-	-	-	-
Add: Net Profit	4.19	5.94	6.81	8.11	10.70
Less: Drawings	2.50	3.00	4.00	5.00	7.00
Closing Balance	3.85	6.79	9.60	12.71	16.41
CC Limit	5.00	5.00	5.00	5.00	5.00
Term Loan	12.80	9.60	6.40	3.20	-
Sundry Creditors	1.03	1.21	1.35	1.48	1.62
TOTAL :	22.67	22.60	22.35	22.39	23.02
APPLICATION OF FUND					
Fixed Assets (Gross)	16.00	16.00	16.00	16.00	16.00
Gross Dep.	2.20	4.09	5.71	7.11	8.31
Net Fixed Assets	13.80	11.91	10.29	8.89	7.69
Current Assets					
Sundry Debtors	2.78	3.31	3.77	4.24	4.74
Stock in Hand	3.91	4.55	5.14	5.73	6.35
Cash and Bank	2.17	2.83	3.16	3.52	4.25
TOTAL :	22.67	22.60	22.35	22.39	23.02

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PROJECTED PROFITABILITY STATE	EMENT				
PARTICULARS	I	п	III	IV	v
A) SALES					
Gross Sale	83.52	99.26	113.02	127.32	142.16
Total (A)	83.52	99.26	113.02	127.32	142.16
B) COST OF SALES					
Raw Material Consumed	43.96	51.93	57.70	63.47	69.24
Elecricity Expenses	2.36	2.66	2.95	3.25	3.55
Repair & Maintenance	16.70	18.86	22.60	25.46	28.43
Labour & Wages	7.43	7.73	8.58	9.53	10.57
Depreciation	2.20	1.89	1.62	1.40	1.20
Cost of Production	72.66	83.07	93.47	103.11	112.99
Add: Opening Stock /WIP	-	2.45	2.82	3.21	3.62
Less: Closing Stock /WIP	2.45	2.82	3.21	3.62	4.04
Cost of Sales (B)	70.22	82.70	93.08	102.70	112.57
C) GROSS PROFIT (A-B)	13.30	16.57	19.95	24.62	29.59
	15.93%	16.69%	17.65%	19.34%	20.81%
D) Bank Interest (Term Loan)	1.56	1.28	0.92	0.57	0.22
ii) Interest On Working Capital	0.55	0.55	0.55	0.55	0.55
E) Salary to Staff	4.91	5.16	5.93	6.82	7.85
F) Selling & Adm Expenses Exp.	2.09	2.98	4.52	5.09	5.69
TOTAL (D+E)	9.11	9.96	11.93	13.04	14.30
H) NET PROFIT	4.19	6.60	8.02	11.58	15.29
	5.0%	6.7%	7.1%	9.1%	10.8%
I) Taxation		0.66	1.20	3.47	4.59
J) PROFIT (After Tax)	4.19	5.94	6.81	8.11	10.70

COMPUTATION OF MAKING OF ACRYLIC PAINT		
Item to be Manufactured Acrylic Paint		
Manufacturing Capacity per day	900	Ltr
No. of Working Hour	8	
No of Working Days per month	25	
No. of Working Day per annum	300	
Total Production per Annum	2,70,000	Ltr
Total Production per Annum	2,70,000	Ltr
Year	Capacity	ACRYLIC PAINTS
	Utilisation	
I	40%	1,08,000.00
П	45%	1,21,500.00
III	50%	1,35,000.00
IV	55%	1,48,500.00
V	60%	1,62,000.00

COMPUTATION OF RAW MATERIAL					
Item Name		Quantity of Raw Material	Unit	Unit Rate of	Total CostPer Annum (100%)
DM Water		1,26,000.00	Ltr	8.00	10,08,000.00
Wetting Agent		720.00	Kg	90.00	64,800.00
HEC		1,260.00	Kg	450.00	5,67,000.00
Pine Oil		1,800.00	Kg	120.00	2,16,000.00
Titanium Dioxide		54.00	Kg	200.00	10,800.00
China Clay		36,000.00	Kg	30.00	10,80,000.00
Calcite		18,000.00	Kg	15.00	2,70,000.00
Acrylic Emulsion		54,000.00	Kg	95.00	51,30,000.00
Thickener & Defoamer		1,800.00	Kg	80.00	1,44,000.00
Preservative ,Emulsifier & Packing material		Lumsum			25,00,000.00
Total					1,09,90,600.00
Total Raw material in Rs lacs					109.91
Raw Material Consumed	Capacity		Amount (Rs.)		
	Utilisation				
T	40.0/		42.0/		

	Utilisation			
Ι	40%	43.96		
II	45%	51.93	5% Increase in Cost	
III	50%	57.70	5% Increase in Cost	
IV	55%	63.47	5% Increase in Cost	
V	60%	69.24	5% Increase in Cost	

COMPUTATION OF SALE					
Particulars	I	II	III	IV	v
Op Stock	-	3,600.00	4,050.00	4,500.00	4,950.00
D 1 (1 00 000 00	1 01 500 00	1 25 000 00	1 49 500 00	1 (2 000 00
Production	1,08,000.00	1,21,500.00	1,35,000.00	1,48,500.00	1,62,000.00
	1,08,000.00	1,25,100.00	1,39,050.00	1,53,000.00	1,66,950.00
Less : Closing Stock(10 Days)	3,600.00	4,050.00	4,500.00	4,950.00	5,400.00
Net Sale	1,04,400.00	1,21,050.00	1,34,550.00	1,48,050.00	1,61,550.00
C1.D	00.00	02.00	04.00	06.00	00.00
Sale Price per Ltr.	80.00	82.00	84.00	86.00	88.00
Sale (in Lacs)	83.52	99.26	113.02	127.32	142.16

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL							
PARTICULARS	I	II	III	IV	v		
Finished Goods							
(7 Days requirement)	2.45	2.82	3.21	3.62	4.04		
Raw Material							
(10 Days requirement)	1.47	1.73	1.92	2.12	2.31		
Closing Stock	3.91	4.55	5.14	5.73	6.35		

COMPUTATION OF WORKING CAPIT			
 Particulars	Amount	Margin(10%)	Net
			Amount
Stock in Hand	3.91		
Less:			
Sundry Creditors	1.03		
Paid Stock	2.89	0.29	2.60
Sundry Debtors	2.78	0.28	2.51
Working Capital Requirement			5.10
Margin			0.57
MPBF			5.10
Working Capital Demand			5.00

BREAK UP OF LABOUR			
Particulars	Wages	No of	Total
	Per Month	Employees	Salary
Supervisor	20,000.00	1	20,000.00
Plant Operator	15,000.00	1	15,000.00
Unskilled Worker	10,000.00	1	10,000.00
Helper	8,000.00	1	8,000.00
Security Guard	6,000.00	1	6,000.00
			59,000.00
Add: 5% Fringe Benefit			2,950.00
Total Labour Cost Per Month			61,950.00
Total Labour Cost for the year (In Rs. Lakhs)		5	7.43

BREAK UP OF SALARY			
Particulars	Salary	No of	Total
	Per Month	Employees	Salary
Manager	20,000.00	1	12,000.00
Accountant cum store keeper	15,000.00	1	15,000.00
Sales	12,000.00	1	12,000.00
Total Salary Per Month			39,000.00
Add: 5% Fringe Benefit			1,950.00
Total Salary for the month			40,950.00
Total Salary for the year (In Rs. Lakhs)		3	4.91

COMPUTATION OF DEPRECI	ATION				
Description	Land	Building/shed	Plant & Machinery	Furniture	TOTAL
Rate of Depreciation		10.00%	15.00%	10.00%	
Opening Balance	Leased		-	-	-
Addition	-	3.00	12.00	1.00	16.00
	-	3.00	12.00	1.00	16.00
		-	-	-	
TOTAL		3.00	12.00	1.00	16.00
Less : Depreciation	-	0.30	1.80	0.10	2.20
WDV at end of Ist year	-	2.70	10.20	0.90	13.80
Additions During The Year	-	-	-	-	-
	-	2.70	10.20	0.90	13.80
Less : Depreciation	-	0.27	1.53	0.09	1.89
WDV at end of IInd Year	-	2.43	8.67	0.81	11.91
Additions During The Year	-	-	-	-	-
	-	2.43	8.67	0.81	11.91
Less : Depreciation	-	0.24	1.30	0.08	1.62
WDV at end of IIIrd year	-	2.19	7.37	0.73	10.29
Additions During The Year	-	-	-	-	-
	-	2.19	7.37	0.73	10.29
Less : Depreciation	-	0.22	1.11	0.07	1.40
WDV at end of IV year	-	1.97	6.26	0.66	8.89
Additions During The Year	-	-	-	-	-
	-	1.97	6.26	0.66	8.89
Less : Depreciation	-	0.20	0.94	0.07	1.20
WDV at end of Vth year	-	1.77	5.32	0.59	7.69

REPAYMEN	T SCHEDULE OF TERN	<u>I LOAN</u>				11.0%	
Year	Particulars	Amount	Addition	Total	Interest	Repayment	Cl Balance
I	Opening Balance						
	Ist Quarter	-	14.40	14.40	0.40	-	14.40
	lind Quarter	14.40	-	14.40	0.40	-	14.40
	IIIrd Quarter	14.40	-	14.40	0.40	0.80	13.60
	Ivth Quarter	13.60	-	13.60	0.37	0.80	12.80
					1.56	1.60	
II	Opening Balance						
	Ist Quarter	12.80	-	12.80	0.35	0.80	12.00
	Iind Quarter	12.00	-	12.00	0.33	0.80	11.20
	IIIrd Quarter	11.20	-	11.20	0.31	0.80	10.40
	Ivth Quarter	10.40		10.40	0.29	0.80	9.60
					1.28	3.20	
III	Opening Balance						
	Ist Quarter	9.60	-	9.60	0.26	0.80	8.80
	Iind Quarter	8.80	-	8.80	0.24	0.80	8.00
	IIIrd Quarter	8.00	-	8.00	0.22	0.80	7.20
	Ivth Quarter	7.20		7.20	0.20	0.80	6.40
					0.92	3.20	
IV	Opening Balance						
	Ist Quarter	6.40	-	6.40	0.18	0.80	5.60
	Iind Quarter	5.60	-	5.60	0.15	0.80	4.80
	IIIrd Quarter	4.80	-	4.80	0.13	0.80	4.00
	Ivth Quarter	4.00		4.00	0.11	0.80	3.20
					0.57	3.20	
v	Opening Balance						
	Ist Quarter	3.20	-	3.20	0.09	0.80	2.40
	lind Quarter	2.40	-	2.40	0.07	0.80	1.60
	IIIrd Quarter	1.60	-	1.60	0.04	0.80	0.80
	Ivth Quarter	0.80		0.80	0.02	0.80	- 0.00
					0.22	3.20	

Door to Door Period	
Moratorium Period	
Repayment Period	

60 Months

6 Months

Repayment Period

54 Months

CALCULATION OF D.S.C.R

PARTICULARS	I	II	III	IV	v
CASH ACCRUALS	6.39	7.83	8.44	9.50	11.90
Interest on Term Loan	1.56	1.28	0.92	0.57	0.22
Total	7.95	9.11	9.36	10.08	12.12
<u>REPAYMENT</u>					
Repayment of Term Loan	1.60	3.20	3.20	3.20	3.20
Interest on Term Loan	1.56	1.28	0.92	0.57	0.22
Total	3.16	4.48	4.12	3.77	3.42
	_				
DEBT SERVICE COVERAGE RATIO	2.51	2.03	2.27	2.67	3.54
AVERAGE D.S.C.R.	+		2.57		
AVERAGE D.S.C.R.			2.57		

COMPUTATION OF ELECTRICITY			
(A) POWER CONNECTION			
Total Working Hour per day	Hours	8	
Electric Load Required	HP	40	
Load Factor		0.7460	
Electricity Charges	per unit	7.50	
Total Working Days		300	
Electricity Charges			5,37,120.00
Add : Minimim Charges (@ 10%)			
(B) DG set No. of Working Days		300	davs
No of Working Hours		0.3	Hour per day
Total no of Hour		90	riour per day
Diesel Consumption per Hour		<u> </u>	
Total Consumption of Diesel		720	
Cost of Diesel		65.00	Rs. / Ltr
Total cost of Diesel		0.47	Ro. / Eu
Add : Lube Cost @15%		0.07	
Total		0.54	
Total cost of Power & Fuel at 100%			5.91
Year	Capacity		Amount
			(in Lacs)
I	40%		2.36
II	45%		2.66
III	50%		2.95
IV	55%		3.25
V	60%		3.55



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