

PROJECT REPORT

Of

ULTRAMARINE BLUE

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding **Ultramarine Blue**.

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.]



Lucknow Office: Sidhivinayak Building ,
27/1/B, Gokhley Marg, Lucknow-226001

Delhi Office : Multi Disciplinary Training
Centre, Gandhi Darshan Rajghat,
New Delhi 110002

Email : info@udyami.org.in
Contact : +91 7526000333, 444, 555

PROJECT AT A GLANCE

- 1 Name of the Entrepreneur : xxxxxxxxx
- 2 Constitution (legal Status) : xxxxxxxxx
- 3 Father / Spouse Name : xxxxxxxxx
- 4 Unit Address : xxxxxxxxxxxxxxxxxxxxxxxxx
- District : xxxxxx
Pin: xxxxxx State: xxxxxxxxx
Mobile : xxxxxx
- 5 Product and By Product : **ULTRAMARINE BLUE**
- 6 Name of the project / business activity proposed : **ULTRAMARINE BLUE MAKING UNIT**
- 7 Cost of Project : Rs.43.89 Lakhs
- 8 Means of Finance
Term Loan Rs.31.5 Lakhs
Own Capital Rs.4.39 Lakhs
Working capital Rs.8 Lakhs
- 9 Debt Service Coverage Ratio : 2.30
- 10 Pay Back Period : 5 Years
- 11 Project Implementation Period : 5-6 Months
- 12 Break Even Point : 28%
- 13 Employment : 10 Persons
- 14 Power Requirement : 50.00 HP
- 15 Major Raw materials : White Kaolin, Anhydrous sodium sulphate, Anhydrous Sodium carbonate, Powdered Sulphur, Charcol, Water, Packing material
- 16 Estimated Annual Sales Turnover (Max Capacity) : 272.30 Lakhs
- 17 Detailed Cost of Project & Means of Finance

COST OF PROJECT

(Rs. In Lakhs)

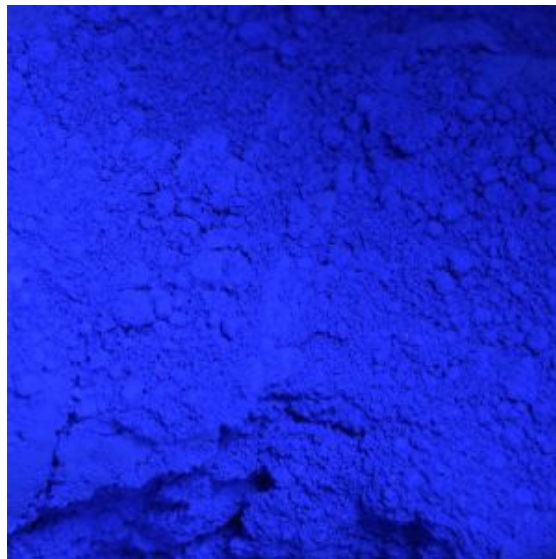
Particulars	Amount
	Own/Rented
Land	33.68
Plant & Machinery	1.32
Furniture & Fixtures	8.89
Working Capital	43.89
Total	43.89

MEANS OF FINANCE

Particulars	Amount
Own Contribution	4.39
Working Capital(Finance)	8.00
Term Loan	31.50
Total	43.89

ULTRAMARINE BLUE

Introduction: Ultramarine blue is a deep blue color pigment which was originally made by grinding lapis lazuli into a powder. The name comes from the Latin ultramarines, which literally means "beyond the sea". Ultramarine blue has small, uniformly sized particles of a single color, but (being a ground-up natural stone) lapis pigment is a mix of colors and irregularly shaped particles, which have a different texture and reflect light differently. Ultramarine blue is not considered toxic, but care should be used in handling the pigment.



Uses & Market Potential: Ultramarine Blue is extremely safe, environmentally friendly and nonhazardous blue pigment with various applications worldwide. It's obtained by a synthetic manufacturing process and thus possibility for close control over its physical, chemical and colour characteristics, enables the production of distinct types of blue pigment, which are readily accepted by plastic, printing ink, paint, cement, soaps, and detergents, paper and many other industries due to the added advantages it

possesses over other organic pigments and dyes. Due to its various application and uses all over the world the demand of this product is also high.

Raw material requirement: The raw materials required are as follow:

1. White Kaolin
2. Anhydrous Sodium Sulphate (Na₂SO₄)
3. Anhydrous Sodium Carbonate (Na₂CO₃)
4. Powdered Sulphur
5. Charcoal
6. Water
7. Packing Material

Machinery & Equipment's required:

Name	Cost
Unloading Bin	20000
Storage Tank(Capacity 500-1000 ltr.)	100000
Fine Grinding Mills	120000
Slurry Mixer(Capacity 500-1500 ltr.)	150000
Slurry Tank (Capacity 500-1500 ltr.)	90000
Preheater	700000
Kiln	1400000
Clinker Cooler	400000
Silo(Capacity 50-100 ton)	200000
Sack Stitching Machine(Capacity 1000 bags per day)	38000
Other machineries & material handling equipments	150000
Total Amount	3368000

Manufacturing Process: Ultramarine poor in silica" is obtained by fusing a mixture of soft clay, sodium sulphate, charcoal, sodium carbonate and sulphur obtained from a slurry mixer. The product is at first white i.e. after mixing, but soon turns green "green ultramarine" when it is pre-heated using air or sulphur dioxide at 350 to 450 °C to oxidise sulphides into the intermediate product to S₂ and Sn chromophore molecules which are responsible for said colour. Then the mixture is heated in a kiln at 700 to 750 °C, sometimes in brick-sized amounts, as the slurry burns, a fine blue pigment is obtained. The resultant solids are then cooled utilizing clinker cooler and ground using fine grinding mill, the whole process produces large amounts of sulphur dioxide which needs to be managed. The produced ultramarine blue is stored in silo from where it's filled in sacks, which are then sealed using sack stitching machine, 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 2000 to 2500Sqft.

Power Requirement: The power consumption required to run all the machinery could be approximated as 50 Hp.

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 10 including 1 Supervisor, 2 Plant operator, 1 unskilled worker, 2 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

FINANCIALS

PROJECTED CASH FLOW STATEMENT					
PARTICULARS	I	II	III	IV	V
SOURCES OF FUND					
Own Contribution	4.39	-			
Reserve & Surplus	8.25	11.98	16.73	23.24	32.19
Depreciation & Exp. W/off	5.18	4.41	3.76	3.20	2.72
Increase In Cash Credit	8.00				
Increase In Term Loan	31.50	-	-	-	-
Increase in Creditors	4.42	0.74	0.52	0.52	0.52
TOTAL :	61.75	17.13	21.00	26.96	35.43
APPLICATION OF FUND					
Increase in Fixed Assets	35.00	-	-	-	-
Increase in Stock	8.27	3.49	1.41	1.45	1.49
Increase in Debtors	5.22	1.01	0.90	0.95	1.00
Repayment of Term Loan	3.50	7.00	7.00	7.00	7.00
Taxation	1.24	3.59	5.02	6.97	9.66
Drawings	1.00	1.50	6.00	10.00	15.00
TOTAL :	54.23	16.59	20.33	26.37	34.15
Opening Cash & Bank Balance	-	7.52	8.06	8.73	9.32
Add : Surplus	7.52	0.54	0.67	0.58	1.28
Closing Cash & Bank Balance	7.52	8.06	8.73	9.32	10.59

PROJECTED BALANCE SHEET					
PARTICULARS	I	II	III	IV	V
SOURCES OF FUND					
Capital Account					
Opening Balance	-	10.41	17.29	23.00	29.27
Add: Additions	4.39	-	-	-	-
Add: Net Profit	7.02	8.39	11.71	16.27	22.53
Less: Drawings	1.00	1.50	6.00	10.00	15.00
Closing Balance	10.41	17.29	23.00	29.27	36.81
CC Limit	8.00	8.00	8.00	8.00	8.00
Term Loan	28.00	21.00	14.00	7.00	-
Sundry Creditors	4.42	5.16	5.67	6.19	6.71
TOTAL :	50.83	51.45	50.68	50.46	51.51
APPLICATION OF FUND					
Fixed Assets (Gross)	35.00	35.00	35.00	35.00	35.00
Gross Dep.	5.18	9.60	13.35	16.55	19.28
Net Fixed Assets	29.82	25.40	21.65	18.45	15.72
Current Assets					
Sundry Debtors	5.22	6.23	7.13	8.08	9.08
Stock in Hand	8.27	11.76	13.17	14.62	16.12
Cash and Bank	7.52	8.06	8.73	9.32	10.59
TOTAL :	50.83	51.45	50.68	50.46	51.51

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PROJECTED PROFITABILITY STATEMENT					
PARTICULARS	I	II	III	IV	V
A) SALES					
Gross Sale	156.60	186.88	213.85	242.33	272.30
Total (A)	156.60	186.88	213.85	242.33	272.30
B) COST OF SALES					
Raw Material Consumed	110.53	128.95	141.84	154.74	167.63
Electricity Expenses	3.26	3.63	3.99	4.35	4.71
Repair & Maintenance	7.83	9.34	12.83	16.96	19.06
Labour & Wages	11.09	12.75	15.30	18.36	22.03
Depreciation	5.18	4.41	3.76	3.20	2.72
Cost of Production	137.89	159.08	177.72	197.61	216.17
Add: Opening Stock /WIP	-	4.59	5.31	6.08	6.89
Less: Closing Stock /WIP	4.59	5.31	6.08	6.89	7.74
Cost of Sales (B)	133.30	158.36	176.96	196.81	215.32
C) GROSS PROFIT (A-B)	23.30	28.52	36.89	45.52	56.98
	14.88%	15.26%	17.25%	18.78%	20.93%
D) Bank Interest (Term Loan)	3.42	2.79	2.02	1.25	0.48
ii) Interest On Working Capital	0.88	0.88	0.88	0.88	0.88
E) Salary to Staff	6.05	7.26	8.71	10.45	12.54
F) Selling & Adm Expenses Exp.	4.70	5.61	8.55	9.69	10.89
TOTAL (D+E)	15.04	16.54	20.16	22.28	24.79
H) NET PROFIT	8.25	11.98	16.73	23.24	32.19
	5.3%	6.4%	7.8%	9.6%	11.8%
I) Taxation	1.24	3.59	5.02	6.97	9.66
J) PROFIT (After Tax)	7.02	8.39	11.71	16.27	22.53

COMPUTATION OF MAKING OF ULTRAMARINE BLUE PIGMENT			
Item to be Manufactured Ultramarine Blue Pigment			
Manufacturing Capacity per day		2,500	Kg
No. of Working Hour		8	
No of Working Days per month		25	
No. of Working Day per annum		300	
Total Production per Annum		7,50,000	Kg
Total Production per Annum		7,50,000	Kg
Year		Capacity	ULTRAMARINE BLUE
		Utilisation	
I		45%	3,37,500.00
II		50%	3,75,000.00
III		55%	4,12,500.00
IV		60%	4,50,000.00
V		65%	4,87,500.00

COMPUTATION OF RAW MATERIAL				
Item Name	Quantity of Raw	Unit	Unit Rate	Total CostPer
hba	2,800.00	Kg	22.00	61,600.00
Anhydrous Sodium Sulphate	10,00,000.00	Kg	16.00	1,60,00,000.00
Anhydrous Sodium Carbonate	64,000.00	Kg	60.00	38,40,000.00
Powdered Sulphur	52,000.00	Kg	45.00	23,40,000.00
Charcoal	1,20,000.00	Kg	16.00	19,20,000.00
Packing Material	Lumsum			4,00,000.00
Total				2,45,61,600.00
Total Raw material in Rs lacs				245.62

Raw Material Consumed	Capacity	Amount (Rs.)	
	Utilisation		
I	45%	110.53	
II	50%	128.95	5% Increase in Cost
III	55%	141.84	5% Increase in Cost
IV	60%	154.74	5% Increase in Cost
V	65%	167.63	5% Increase in Cost

COMPUTATION OF SALE					
Particulars	I	II	III	IV	V
Op Stock	-	11,250.00	12,500.00	13,750.00	15,000.00
Production	3,37,500.00	3,75,000.00	4,12,500.00	4,50,000.00	4,87,500.00
Less : Closing Stock(10 Days)	3,37,500.00	3,86,250.00	4,25,000.00	4,63,750.00	5,02,500.00
Net Sale	11,250.00	12,500.00	13,750.00	15,000.00	16,250.00
Sale Price per Kg	3,26,250.00	3,73,750.00	4,11,250.00	4,48,750.00	4,86,250.00
Sale (in Lacs)	48.00	50.00	52.00	54.00	56.00
	156.60	186.88	213.85	242.33	272.30

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL					
PARTICULARS	I	II	III	IV	V
Finished Goods					
(10 Days requirement)	4.59	5.31	6.08	6.89	7.74
Raw Material					
(10 Days requirement)	3.68	6.45	7.09	7.74	8.38
Closing Stock	8.27	11.76	13.17	14.62	16.12

COMPUTATION OF WORKING CAPITAL REQUIREMENT			
Particulars	Amount	Margin(10%)	Net Amount
Stock in Hand	8.27		
Less:			
Sundry Creditors	4.42		
Paid Stock	3.85	0.39	3.47
Sundry Debtors	5.22	0.52	4.70
Working Capital Requirement			8.17
Margin			0.91
MPBF			8.17
Working Capital Demand			8.00

BREAK UP OF LABOUR				
Particulars		Wages	No of	Total
		Per Month	Employees	Salary
Supervisor		20,000.00	1	20,000.00
Plant Operator		18,000.00	2	36,000.00
Unskilled Worker		10,000.00	1	10,000.00
Helper		8,000.00	2	16,000.00
Security Guard		6,000.00	1	6,000.00
				88,000.00
Add: 5% Fringe Benefit				4,400.00
Total Labour Cost Per Month				92,400.00
Total Labour Cost for the year (In Rs. Lakhs)			7	11.09

BREAK UP OF SALARY				
Particulars		Salary	No of	Total
		Per Month	Employees	Salary
Manager		20,000.00	1	20,000.00
Accountant cum store keeper		16,000.00	1	16,000.00
Sales		12,000.00	1	12,000.00
Total Salary Per Month				48,000.00
Add: 5% Fringe Benefit				2,400.00
Total Salary for the month				50,400.00
Total Salary for the year (In Rs. Lakhs)			3	6.05

COMPUTATION OF DEPRECIATION				
Description	Land	Plant & Machinery	Furniture	TOTAL
Rate of Depreciation		15.00%	10.00%	
Opening Balance	Leased	-	-	-
Addition	-	33.68	1.32	35.00
	-	33.68	1.32	35.00
		-	-	
TOTAL		33.68	1.32	35.00
Less : Depreciation	-	5.05	0.13	5.18
WDV at end of Ist year	-	28.63	1.19	29.82
Additions During The Year	-	-	-	-
	-	28.63	1.19	29.82
Less : Depreciation	-	4.29	0.12	4.41
WDV at end of IInd Year	-	24.33	1.07	25.40
Additions During The Year	-	-	-	-
	-	24.33	1.07	25.40
Less : Depreciation	-	3.65	0.11	3.76
WDV at end of IIIrd year	-	20.68	0.96	21.65
Additions During The Year	-	-	-	-
	-	20.68	0.96	21.65
Less : Depreciation	-	3.10	0.10	3.20
WDV at end of IV year	-	17.58	0.87	18.45
Additions During The Year	-	-	-	-
	-	17.58	0.87	18.45
Less : Depreciation	-	2.64	0.09	2.72
WDV at end of Vth year	-	14.94	0.78	15.72

REPAYMENT SCHEDULE OF TERM LOAN						11.0%	
Year	Particulars	Amount	Addition	Total	Interest	Repayment	CI Balance
I	Opening Balance						
	Ist Quarter	-	31.50	31.50	0.87	-	31.50
	IInd Quarter	31.50	-	31.50	0.87	-	31.50
	IIIrd Quarter	31.50	-	31.50	0.87	1.75	29.75
	Ivth Quarter	29.75	-	29.75	0.82	1.75	28.00
					3.42	3.50	
II	Opening Balance						
	Ist Quarter	28.00	-	28.00	0.77	1.75	26.25
	IInd Quarter	26.25	-	26.25	0.72	1.75	24.50
	IIIrd Quarter	24.50	-	24.50	0.67	1.75	22.75
	Ivth Quarter	22.75		22.75	0.63	1.75	21.00
					2.79	7.00	
III	Opening Balance						
	Ist Quarter	21.00	-	21.00	0.58	1.75	19.25
	IInd Quarter	19.25	-	19.25	0.53	1.75	17.50
	IIIrd Quarter	17.50	-	17.50	0.48	1.75	15.75
	Ivth Quarter	15.75		15.75	0.43	1.75	14.00
					2.02	7.00	
IV	Opening Balance						
	Ist Quarter	14.00	-	14.00	0.39	1.75	12.25
	IInd Quarter	12.25	-	12.25	0.34	1.75	10.50
	IIIrd Quarter	10.50	-	10.50	0.29	1.75	8.75
	Ivth Quarter	8.75		8.75	0.24	1.75	7.00
					1.25	7.00	
V	Opening Balance						
	Ist Quarter	7.00	-	7.00	0.19	1.75	5.25
	IInd Quarter	5.25	-	5.25	0.14	1.75	3.50
	IIIrd Quarter	3.50	-	3.50	0.10	1.75	1.75
	Ivth Quarter	1.75		1.75	0.05	1.75	-
					0.48	7.00	

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

CALCULATION OF D.S.C.R					
PARTICULARS	I	II	III	IV	V
CASH ACCRUALS	12.20	12.80	15.47	19.47	25.26
Interest on Term Loan	3.42	2.79	2.02	1.25	0.48
Total	15.62	15.59	17.49	20.72	25.74
REPAYMENT					
Repayment of Term Loan	3.50	7.00	7.00	7.00	7.00
Interest on Term Loan	3.42	2.79	2.02	1.25	0.48
Total	6.92	9.79	9.02	8.25	7.48
DEBT SERVICE COVERAGE RATIO	2.26	1.59	1.94	2.51	3.44
AVERAGE D.S.C.R.			2.30		

COMPUTATION OF ELECTRICITY				
(A) POWER CONNECTION				
Total Working Hour per day		Hours	8	
Electric Load Required		HP	50	
Load Factor			0.7460	
Electricity Charges		per unit	7.50	
Total Working Days			300	
Electricity Charges				6,71,400.00
Add : Minimim Charges (@ 10%)				
(B) DG set				
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%				7.25
Year		Capacity		Amount (in Lacs)
I		45%		3.26
II		50%		3.63
III		55%		3.99
IV		60%		4.35
V		65%		4.71

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