### **PROJECT REPORT**

Of

# **MICA PAPER**

### **PURPOSE OF THE DOCUMENT**

This particular pre-feasibility is regarding Mica Paper Manufacturing unit.

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.]



<u>Lucknow Office</u>: Sidhivinayak Building , 27/1/B, Gokhlley Marg, Lucknow-226001

<u>Delhi Office</u>: 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 Entreprenuer		xxxxxxxxx							
2	Constitution (legal Status) :		xxxxxxxxx							
3	Father / Spouse Name		xxxxxxxxxx							
4	Unit Address :		xxxxxxxxxxxxxxxxx							
			District : Pin: Mobile	XXXXXXX XXXXXXX XXXXXXX	State: xxxxx					
5	Product and By Product	:	MICA PAPER							
6	Name of the project / business activity proposed :		MICA PAPER MANUFAC	TURING UNIT						
7	Cost of Project	:	Rs.21.71 Lakhs							
8	Means of Finance Term Loan Own Capital Working Capital		Rs.14.04 Lakhs Rs.2.17 Lakhs Rs.5.49 Lakhs							
9	Debt Service Coverage Ratio	:	2.69							
10	Pay Back Period	:	5	Years						
11	Project Implementation Period	:	5-6	Months						
12	Break Even Point	:	39%							
13	Employment	:	12	Persons						
14	Power Requirement	:	45.00	HP						
15	Major Raw materials	:	Mica & other materials							
16	Estimated Annual Sales Turnover (Max Capacity)	:	153.27	Lakhs						
17	Detailed Cost of Project & Means of Finance									
	COST OF PROJECT			(Rs. In Lakhs)						
			Particulars	Amount						
			Land	Own/Rented						
			Plant & Machinery Furniture & Fixtures	15.00 0.60						
			Working Capital	6.11						
			Total	21.71						
	MEANS OF FINANCE									
		j	Particulars	Amount						
			Own Contribution	2.17						

Particulars	Amount
Own Contribution	2.17
Working Capital(Finance)	5.49
Term Loan	14.04
Total	21.71

# **MICA PAPER MANUFACTURING UNIT**

## **Introduction:**

Micas are a group of minerals whose outstanding physical characteristics is that individual crystals can be split into extremely thin plastic sheets while Mica Paper is a Highly Insulating material used in various applications. It is a "Paper-like" material made by the hydraulic separation process using the best quality of mica that includes Muscovite, Phlogopite, Synthetic, or Calcined Mica. It is first converted into pulp, and then pressed in the form of paper into rolls. It is mainly used in all kinds of Micanite plates and Micanite tapes.

Some of the major advantages of using Mica Paper can be listed as below:

- It has excellent electrical as well as thermal insulating property,
- It has temperature resistance up to 1000 °C.
- It has good tensile strength and good air permeability.
- It also has good resin penetration.
- It has homogeneous distribution of granularity and structure.



## **Uses & Market Potential:**

Some of the most common uses of the Mica Paper can be listed as below:

- 1. Mica paper is used to make Mica Sheet and Mica tapes
- 2. It acts as an insulating material in most of the high voltage and high temperature applications.
- 3. They are used as replacements for Asbestos and other insulating boards.
- 4. It is also used as base and covers plates for elements for toasters, hair dryers, air heater, electric irons etc.

The global Mica market is expected to reach 709 Million US Dollars at a CAGR of 4 % from 2020 to 2025. The major market drivers for mica and its products includes the Electrical & Electronics industry, paints and coating industries, construction, and personal care industries. Emerging trends have a direct impact on the growth of this industry. These include Ultrafine mica and Synthetic mica.

The Mica paper market is expected to grow at a CAGR of 6.4 % in the forecast period of 2020- 2025 and is expected to reach 253.6 Million US Dollars by 2025 from 197.8 Million US Dollars in 2019. The market can be segmented on the basis of Type of the mineral, Application, and Regional division. On the basis of type, the market can be divided into Natural muscovite paper, Natural Phlagopite paper, and Synthetic mica paper.

### **Product:**

Mica Paper

# **Raw Material:**

The raw materials required are:

- > Mica (It can either be Muscovite or Phlogopite or Synthetic or Calcined.)
- > other ingredients include heat-resistant Silicone resin or any other Binder resin, Water, Colloid forming agents such a kaolinite and sepeiolite clays, etc.

# **Manufacturing Process:**



# Area:

The industrial setup requires space for Inventory, workshop or manufacturing area, space for power supply utilities and polishing area. Also, some of the area of building is required for office staff facilities, office furniture, etc. Thus, the approximate total area required for complete industrial setup is 2000-2500Sqft.

# **Cost of Machines:**

Machine	Quantity	Price
Hammer Mill or Jaw Crusher	1	5,00,000
Industrial Mixing units	1	1,00,000
Industrial Oven	1	50,000
Mica Paper Dryer Machine	1	2,00,000
Calendaring machine	1	1,50,000
C-type hydraulic press	1	3,00,000
Mica paper cutting unit	1	1,00,000
Distilled water plant	1	1,00,000
TOTAL		15,00,000

**Power Requirement-** The estimated Power requirement is taken at 45 HP.

# **Manpower Requirement**—Following manpower is required:

- Machine operator-2
- Skilled/unskilled worker-3
- Helper-4
- Manager cum Accountant-1
- Sales Personnel-2

# **FINANCIALS**

### PROJECTED BALANCE SHEET

PARTICULARS	I	II	III	IV	V
SOURCES OF FUND					
Capital Account	_				
Opening Balance	-	3.18	4.99	7.36	10.46
Add: Additions	2.17	-	-	-	-
Add: Net Profit	4.81	6.01	7.16	8.61	10.03
Less: Drawings	3.80	4.20	4.80	5.50	6.80
Closing Balance	3.18	4.99	7.36	10.46	13.69
CC Limit	5.49	5.49	5.49	5.49	5.49
Term Loan	12.48	9.36	6.24	3.12	-
Sundry Creditors	3.00	3.37	3.75	4.14	4.55
TOTAL:	24.16	23.21	22.84	23.22	23.73
APPLICATION OF FUND					
Fixed Assets (Gross)	15.60	15.60	15.60	15.60	15.60
Gross Dep.	2.31	4.28	5.95	7.38	8.59
Net Fixed Assets	13.29	11.32	9.65	8.22	7.01
<b>Current Assets</b>					
Sundry Debtors	4.40	5.14	5.78	6.45	7.15
Stock in Hand	4.71	6.41	7.14	7.89	8.67
Cash and Bank	1.76	0.34	0.27	0.65	0.90
TOTAL:	24.16	23.21	22.84	23.22	23.73

PARTICULARS	I	II	III	IV	V
A) SALES					
Gross Sale	94.25	110.13	123.78	138.15	153.27
Total (A)	94.25	110.13	123.78	138.15	153.27
B) COST OF SALES					
Raw Material Consumed	60.00	67.32	74.92	82.78	90.93
Elecricity Expenses	5.04	5.54	6.04	6.55	7.05
Repair & Maintenance	1.89	2.20	2.48	2.76	3.07
Labour & Wages	11.97	14.36	16.66	19.16	21.46
Depreciation	2.31	1.97	1.67	1.43	1.21
Cost of Production	81.20	91.39	101.77	112.67	123.72
Add: Opening Stock /WIP	-	2.71	3.05	3.39	3.76
Less: Closing Stock /WIP	2.71	3.05	3.39	3.76	4.12
Cost of Sales (B)	78.49	91.05	101.42	112.31	123.35
C) GROSS PROFIT (A-B)	15.76	19.08	22.36	25.84	29.92
	16.72%	17.32%	18.06%	18.71%	19.52%
D) Bank Interest i) (Term Loan)	1.52	1.24	0.90	0.56	0.21
ii) Interest On Working Capital	0.60	0.60	0.60	0.60	0.60
E) Salary to Staff	7.31	8.04	9.24	11.09	12.76
F) Selling & Adm Expenses Exp.	1.51	2.75	3.71	3.87	4.60
G) TOTAL (D+E+F)	10.94	12.64	14.46	16.12	18.17
H) NET PROFIT	4.81	6.44	7.90	9.72	11.74
	5.1%	5.8%	6.4%	7.0%	7.7%
I) Taxation	-	0.43	0.73	1.11	1.71
/		-			, -
J) PROFIT (After Tax)	4.81	6.01	7.16	8.61	10.03

### PROJECTED CASH FLOW STATEMENT

PARTICULARS	I	II	III	IV	V
COVE CES OF TWO					
SOURCES OF FUND					
Own Contribution	2.17	_	_	_	_
Reserve & Surplus	4.81	6.44	7.90	9.72	11.74
Depriciation & Exp. W/off	2.31	1.97	1.67	1.43	1.21
Increase In Cash Credit	5.49	-	-	-	-
Increase In Term Loan	14.04	-	-	-	-
Increase in Creditors	3.00	0.37	0.38	0.39	0.41
TOTAL:	31.83	8.77	9.95	11.54	13.37
<b>APPLICATION OF FUND</b>					
Increase in Fixed Assets	15.60	-	-	-	-
Increase in Stock	4.71	1.71	0.73	0.76	0.78
Increase in Debtors	4.40	0.74	0.64	0.67	0.71
Repayment of Term Loan	1.56	3.12	3.12	3.12	3.12
Taxation	-	0.43	0.73	1.11	1.71
Drawings	3.80	4.20	4.80	5.50	6.80
TOTAL:	30.07	10.20	10.01	11.16	13.12
Opening Cash & Bank Balance	-	1.76	0.34	0.27	0.65
Add : Surplus	1.76	1.42	- 0.07	0.38	0.25
		<u> </u>			
Closing Cash & Bank Balance	1.76	0.34	0.27	0.65	0.90

#### COMPUTATION OF CLOSING STOCK & WORKING CAPITAL IV **PARTICULARS** I II Ш V Finished Goods (10 Days requirement) 3.05 3.39 3.76 4.12 2.71 Raw Material (10 Days requirement) 2.00 3.37 3.75 4.14 4.55

6.41

7.14

7.89

8.67

### COMPUTATION OF WORKING CAPITAL REQUIREMENT

4.71

**Closing Stock** 

Particulars	Amount	Margin(10%)	Net
			Amount
Stock in Hand	4.71		
Less:			
Sundry Creditors	3.00		
Paid Stock	1.71	0.17	1.54
Sundry Debtors	4.40	0.44	3.96
Working Capital Requirement			5.49
Margin			0.61
MPBF			5.49
<b>Working Capital Der</b>	nand		5.49

REPAYMENT SCHEDULE OF TERM LOAN 11.0%							
Year	Particulars	Amount	Addition	Total	Interest	Repayment	Cl Balance
I	Opening Balance						
	Ist Quarter	-	14.04	14.04	0.39	-	14.04
	Iind Quarter	14.04	-	14.04	0.39	-	14.04
	IIIrd Quarter	14.04	-	14.04	0.39	0.78	13.26
	Ivth Quarter	13.26	-	13.26	0.36	0.78	12.48
					1.52	1.56	
П	Opening Balance						
	Ist Quarter	12.48	-	12.48	0.34	0.78	11.70
	Iind Quarter	11.70	-	11.70	0.32	0.78	10.92
	IIIrd Quarter	10.92	-	10.92	0.30	0.78	10.14
	Ivth Quarter	10.14		10.14	0.28	0.78	9.36
					1.24	3.12	
Ш	Opening Balance						
	Ist Quarter	9.36	-	9.36	0.26	0.78	8.58
	Iind Quarter	8.58	-	8.58	0.24	0.78	7.80
	IIIrd Quarter	7.80	-	7.80	0.21	0.78	7.02
	Ivth Quarter	7.02		7.02	0.19	0.78	6.24
					0.90	3.12	
IV	Opening Balance						
	Ist Quarter	6.24	-	6.24	0.17	0.78	5.46
	Iind Quarter	5.46	-	5.46	0.15	0.78	4.68
	IIIrd Quarter	4.68	-	4.68	0.13	0.78	3.90
	Ivth Quarter	3.90		3.90	0.11	0.78	3.12
					0.56	3.12	
V	Opening Balance						
	Ist Quarter	3.12	-	3.12	0.09	0.78	2.34
	Iind Quarter	2.34	-	2.34	0.06	0.78	1.56
	IIIrd Quarter	1.56	-	1.56	0.04	0.78	0.78
	Ivth Quarter	0.78		0.78	0.02	0.78	0.00
					0.21	3.12	

Door to Door Period60MonthsMoratorium Period6MonthsRepayment Period54Months

	<b>CALCULATION</b>	OF D.S.C.R	
--	--------------------	------------	--

PARTICULARS	I	II	III	IV	V
<u>CASH ACCRUALS</u>	7.12	7.98	8.84	10.03	11.24
Interest on Term Loan	1.52	1.24	0.90	0.56	0.21
Total	8.65	9.22	9.74	10.59	11.46
<u>REPAYMENT</u>					
Repayment of Term Loan	1.56	3.12	3.12	3.12	3.12
Interest on Term Loan	1.52	1.24	0.90	0.56	0.21
Total	3.08	4.36	4.02	3.68	3.33
DEBT SERVICE COVERAGE RATIO	2.80	2.11	2.42	2.88	3.44
AVERAGE D.S.C.R.			2.69		

### **Assumptions:**

- 1. Production Capacity of Mica Paper Manufacturing unit is taken at 1000 KG per day. First year, Capacity has been taken @ 50%.
- 2. Working shift of 10 hours per day has been considered.
- 3. Raw Material stock and Finished goods closing stock has been taken for 10 days.
- 4. Credit period to Sundry Debtors has been given for 14 days.
- 5. Credit period by the Sundry Creditors has been provided for 15 days.
- 6. Depreciation and Income tax has been taken as per the Income tax Act, 1961.
- 7. Interest on working Capital Loan and Term loan has been taken at 11%.
- 8. Salary and wages rates are taken as per the Current Market Scenario.
- 9. Power Consumption has been taken at 45 HP.
- 10. Selling Prices & Raw material costing has been increased by 3% & 2% respectively in the subsequent years.



#### **DISCLAIMER**

The views expressed in this Project Report are advisory in nature. SAMADHAN assume no financial liability to anyone using the content for any purpose. All the materials and content contained in Project report is for educational purpose and reflect the views of the industry which are drawn from various research material sources from internet, experts, suppliers and various other sources. The actual cost of the project or industry will have to be taken on case to case basis considering specific requirement of the project, capacity and type of plant and other specific factors/cost directly related to the implementation of project. It is intended for general guidance only and must not be considered a substitute for a competent legal advice provided by a licensed industry professional. SAMADHAN hereby disclaims any and all liability to any party for any direct, indirect, implied, punitive, special, incidental or other consequential damages arising directly or indirectly from any use of the Project Report Content, which is provided as is, and without warranties.