PROJECT REPORT

Of

BLACK INSULATING TAPE

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding **Black Insulating Tape 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.]



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PROJECT AT A GLANCE 1 Name of the Entreprenuer XXXXXXX 2 Constitution (legal Status) XXXXXXX 3 Father's/Spouce's Name XXXXXXX Unit Address XXXXXXXX Taluk/Block: XXXXX District: Pin: XXXXX State: E-Mail XXXXX Mobile XXXXX 5 Product and By Product **Black Insulation Tape** $6 \quad \text{Name of the project / business activity proposed}: \\$ **Black Insulation Tape** 7 Cost of Project Rs18.00lac Means of Finance Rs.12.56 Lacs Term Loan KVIC Margin Money As per Project Eligibility Own Capital Rs.1.8 Lacs Working Capital Rs.3.63 Lacs Debt Service Coverage Ratio 5.01 10 Pay Back Period 5 Years 11 Project Implementation Period 8 Months Break Even Point 21% Employment 7 Persons Power Requirement 7.00 HP Major Raw materials Fabric Rubber resin Benzene etc 16 Estimated Annual Sales Turnover 28.35 Lacs 16 Detailed Cost of Project & Means of Finance COST OF PROJECT (Rs. In Lacs) Particulars Amount Land Rented/Owned Building & Civil Work (2000 Sq Ft) 4.00 Plant & Machinery 9.00 0.46 Furniture & Fixtures Pre-operative Expenses 0.50 Working Capital Requirement 4.04 18.00 Total MEANS OF FINANCE Particulars Amount Own Contribution @10% 1.80 12.56 Term Loan Workign Capital Finance 3.63 18.00 Total Special

General Beneficiary's Margin Money 10% 5%

(% of Project Cost)

PROJECT REPORT ON BLACK INSULATING TAPE



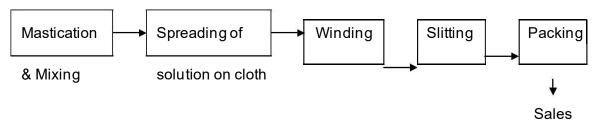
Introduction: Cotton selvedge tape for electrical insulation purposes as per IS:1923-1973 and IS:2448 (Part-I)-1963 of Bureau of Indian standards are often referred to as Black Tape. These are used in manufacture of ovens, Furnaces, Motors, etc. and in household electrical wirings & equipments. These are resistant to pressure & temperature. Electrical insulation is the main feature of Black Tapes. It is also used by cable manufacturers to cover conductors.

Market: Black insulating tapes are used to cover joints of two conductors and hence an item of everyday use of all electrifications. Joining of more than one cable/conductor is unavoidable in electrification works and hence Black Tape is a need for electrification works. With massive Electric generation and hence distribution network under implementation in Tripura, therefore, large demand for Black insulating tapes exist. These are sold through all Electrical stores in the state.

Installed Capacity: Operating for single shift of 8 hours per day for 300 working days per annum, the unit shall have an annual installed capacity to produce 2.64 Lakh rolls of Black insulation tapes.

Process of Manufacture: The unit will purchase 54 inch wide evenly and firmly woven cotton fabrics, free from weaving defects. Normally the fabric is Black in colour. Rubber compound with 12.50 percent Crepe Rubber, 5 percent National Rubber, 49.50 percent asbestos powder, 12.50 percent Resin, 0.50 percent Carbon Black and 20 percent castor oil are made in Mixing Mill so that the Rubber mix is made into a homogeneous mass. This Rubber mass is mixed with turpentine oil/Benzene in the same Mixing Mill. This fluid is spread over the cotton fabric in a spreading Machine by using Doctors Blade Technique so that the cost of Rubber solution is uniform. The coated fabric is cut to the required width on a slitting Machine and wound on a winding machine into rolls of desired length. These are then labeled on sides of Rolls and packed in polyethylene.

Process Flow Sheet:



Raw Materials: The principal raw material of the unit will be petroleum based solvent as double the quantum of all other raw materials taken together shall be solvent. It will be available from Assam Oil Division of Indian Oil Corporation. All other raw materials are available comparatively cheap. The annual requirement at the installed capacity and costs are shown below:

SI.No.	Description	Quantity required	Cost in Rs.
1.	Benzene	3000 Liters	2,55,000.00
2.	Asbestos Powder	743 kilograms	52,010.00
3.	Castor oil	300 Liters	30,000.00
4.	Crepe Rubber	188 kilograms	37,600.00
5.	Resin	187 kilograms	14,025.00
6.	National Rubber	75 kilograms	11,250.00
7.	Carbon Black	8 kilograms	400.00

8.	Zinc oxide	8 kilograms	1,600.00
9.	Labels	1,50,000 Numbers	15,000.00
10.	Polyeth ylene films	100 kilograms	45,000.00
		Total:	4,61,885.00

PROJECTED BALANCE SHEET

ICT VEAD	IIND VEAD	HIDD VEAD	IVTH VEAD	VTH YEAR
131 TEAR	IIIVD TEAK	IIIKD TEAK	IVIII ILAK	VIII IEAK
1.80	1.80	1.80	1.80	1.80
14.93	31.12	48.26	65.16	81.65
12.56	9.42	6.28	3.14	0.47
3.63	3.63	3.63	3.63	3.63
0.08	0.09	0.10	0.10	0.10
0.36	0.40	0.44	0.48	0.53
33.36	46.45	60.51	74.31	88.17
13.46	13.46	13.46	13.46	13.46
1.77	3.32	4.66	5.82	6.82
11.69	10.14	8.80	7.64	6.64
0.95	1.19	1.34	1.35	1.35
3.17	3.62	4.07	4.07	4.07
	20.74	42.20	57.92	
15.06	28.76	43.28	37.92	72.45
15.06 2.50	28.76 2.75	3.03	3.33	72.45
	12.56 3.63 0.08 0.36 33.36 13.46 1.77 11.69	1.80 1.80 14.93 31.12 12.56 9.42 3.63 3.63 0.08 0.09 0.36 0.40 33.36 46.45 13.46 1.77 3.32 11.69 10.14 0.95 1.19	1.80 1.80 1.80 14.93 31.12 48.26 12.56 9.42 6.28 3.63 3.63 3.63 0.08 0.09 0.10 0.36 0.40 0.44 33.36 46.45 60.51 13.46 13.46 13.46 11.69 10.14 8.80 0.95 1.19 1.34	1.80 1.80 1.80 1.80 14.93 31.12 48.26 65.16 12.56 9.42 6.28 3.14 3.63 3.63 3.63 3.63 0.08 0.09 0.10 0.10 0.36 0.40 0.44 0.48 33.36 46.45 60.51 74.31 13.46 13.46 13.46 5.82 11.69 10.14 8.80 7.64 0.95 1.19 1.34 1.35

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PROJECTED CASH FLOW STATEMENT

PARTICULARS	IST YEAR	IIND YEAR III	RD YEARIV	TH YEAR V	TH YEAR
SOURCES OF FUND					
Share Capital	1.80	-			
Reserve & Surplus	14.93	17.99	21.43	21.12	20.61
Depriciation & Exp. W/off	1.77	1.55	1.34	1.16	1.00
Increase in Cash Credit	3.63	-	-	-	-
Increase In Term Loan	12.56	-	-	-	-
Increase in Creditors	0.08	0.01	0.01	-	-
Increase in Provisions	0.36	0.04	0.04	0.04	0.05
TOTAL:	35.13	19.59	22.82	22.32	21.66
APPLICATION OF FUND					
	10.46				
Increase in Fixed Assets	13.46	- 0.45	- 0.45	-	-
Increase in Stock	3.17	0.45	0.45	-	-
Increase in Debtors	0.95	0.24	0.15	0.02	-
Increase in Deposits & Adv	2.50	0.25	0.28	0.30	0.33
Repayment of Term Loan	-	3.14	3.14	3.14	2.67
Taxation	-	1.80	4.29	4.22	4.12
TOTAL:	20.07	5.88	8.31	7.68	7.13
Opening Cash & Bank Balance	-	15.06	28.76	43.28	57.92
Add : Surplus	15.06	13.71	14.52	14.64	14.53
Closing Cash & Bank Balance	15.06	28.76	43.28	57.92	72.45

PROJECTED PROFITABILITY STATEMENT

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
A) SALES	20.25	25.55	40.05	40.50	40.50
Gross Sale	28.35	35.55	40.05	40.50	40.50
Total (A)	28.35	35.55	40.05	40.50	40.50
B) COST OF SALES					
Raw Mateiral Consumed	3.23	3.70	4.16	4.16	4.16
Elecricity Expenses	0.70	0.80	0.90	0.90	0.90
Repair & Maintenance	_	0.36	0.40	0.41	0.41
Labour & Wages	4.75	5.23	5.75	6.32	6.96
Depriciation	1.77	1.55	1.34	1.16	1.00
Consumables and Other Expense	0.57	0.71	0.80	0.81	0.81
Cost of Production	11.03	12.34	13.35	13.76	14.23
Add: Opening Stock/WIP	_	2.52	2.88	3.24	3.24
Less: Closing Stock/WIP	2.52	2.88	3.24	3.24	3.24
Cost of Sales (B)	8.51	11.98	12.99	13.76	14.23
C) GROSS PROFIT (A-B)	19.84	23.57	27.06	26.74	26.27
	70%	66%	68%	66%	65%
D) Bank Interest (Term Loan)	1.08	1.31	0.95	0.59	0.23
Bank Interest (C.C. Limit)	0.36	0.36	0.36	0.36	0.36
E) Salary to Staff	2.90	3.19	3.51	3.87	4.25
F) Selling & Adm Expenses Exp.	0.57	0.71	0.80	0.81	0.81
TOTAL (D+E)	4.92	5.58	5.63	5.63	5.66
H) NET PROFIT	14.93	17.99	21.43	21.12	20.61
I) Taxation	-	1.80	4.29	4,22	4.12
J) PROFIT (After Tax)	14.93	16.19	17.15	16.90	16.49

COMPUTATION OF MANUFACTURING OF BLACK INSULATION TAPE

Items to be Manufactured Black insulation tape

Manufacturing Capacity per day	- 750.00	pcs
	-	
No. of Working Hour	8	
No of Working Days per month	25	
No. of Working Day per annum	300	
Total Production per Annum	2,25,000.00	pcs
Year	Capacity	pcs
	Utilisation	
IST YEAR	70%	1,57,500
IIND YEAR	80%	1,80,000
IIIRD YEAR	90%	2,02,500
IVTH YEAR	90%	2,02,500
VTH YEAR	90%	2,02,500

COMPUTATION OF RAW MATERIAL

Item Name	UOM	Quantity of		Unit Rate	Total Cost
		Raw Material			Per Annum (100%)
Benzene	Litres	3000		85.00	2,55,000.00
Asbestos Powder	Kilograms	743		70.00	52,010.00
Castor oil	Litres	300		100.00	30,000.00
Crepe Rubber	Kilograms	188		200.00	37,600.00
Resin	Kilograms	187		75.00	14,025.00
National Rubber	Kilograms	75		150.00	11,250.00
Carbon Black	Kilograms	8		50.00	400.00
Zinc oxide	Kilograms	8		200.00	1,600.00
Labels	Numbers	1,50,000.00		0.10	15,000.00
Polyethylene films	Kilograms	100		450.00	45,000.00
	<u> </u>		Total (Rounded	off in lacs)	4,61,885.00

Annual Consumption cost (In Lacs) 4.62

Raw Material Consumed	Capacity Utilisation	Amount (Rs.)	
IST YEAR	70%	3.23	
IIND YEAR	80%	3.70	
IIIRD YEAR	90%	4.16	
IVTH YEAR	90%	4.16	
VTH YEAR	90%	4.16	

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
Finished Goods					
(30 Days requirement)	2.52	2.88	3.24	3.24	3.24
Raw Material					
(60Days requirement)	0.65	0.74	0.83	0.83	0.83
Closing Stock	3.17	3.62	4.07	4.07	4.07

COMPUTATION OF WORKING CAPITAL REQUIREMENT

Particulars		Total
		Amount
Stock in Hand		3.17
Sundry Debtors		0.95
	Total	4.11
Sundry Creditors		0.08
Working Capital Requirement		4.04
Margin		0.40
Working Capital Finance		3.63

BREAK UP OF LABOUR

Particulars		Wages	No of	Total
		Per Month	Employees	Salary
Skilled Worker		9,000.00	2	18,000.00
Unskilled Worker		6,000.00	3	18,000.00
				36,000.00
Add: 10% Fringe Benefit				3,600.00
Total Labour Cost Per Month				39,600.00
Total Labour Cost for the year (In Rs. Lak	khs)		5	4.75

BREAK UP OF SALARY

Particulars	Salary	No of	Total
	Per Month	Employees	Salary
Manager cum chemist	12,000.00	1	12,000.00
Sales	10,000.00	1	10,000.00
Total Salary Per Month			22,000.00
Add: 10% Fringe Benefit			2,200.00
Total Salary for the month			24,200.00
Total Salary for the year (In Rs. Lakhs)		2	2.90

COMPUTATION OF DEPRECIATION

			Plant &		1
Description	Land	Building/shed	Machinery	Furniture	TOTAL
		10.000/	1 200 /	10.000/	
Rate of Depreciation		10.00%	15.00%	10.00%	·
Opening Balance	Leased	-	-	-	-
Addition	-	4.00	9.00	0.46	13.46
	-	4.00	9.00	0.46	13.46
Less : Depreciation	-	0.40	1.35	0.02	1.77
WDV at end of Ist year	-	3.60	7.65	0.44	11.69
Additions During The Year	-			-	
	-	3.60	7.65	0.44	11.69
Less : Depreciation	-	0.36	1.15	0.04	1.55
WDV at end of IInd Year	-	3.24	6.50	0.39	10.14
Additions During The Year	-	-	-	-	- -
	-	3.24	6.50	0.39	10.14
Less : Depreciation	-	0.32	0.98	0.04	1.34
WDV at end of IIIrd year	-	2.92	5.53	0.35	8.80
Additions During The Year	-	-	-	-	-
	-	2.92	5.53	0.35	8.80
Less : Depreciation	-	0.29	0.83	0.04	1.16
WDV at end of IV year	-	2.62	4.70	0.32	7.64
Additions During The Year	-	-	-	-	-
	-	2.62	4.70	0.32	7.64
Less : Depreciation	-	0.26	0.70	0.03	1.00
WDV at end of Vth year	-	2.36	3.99	0.29	6.64

Year	Particulars	Amount	Addition	Total	Interest	Repayment	Cl Balance
IST YEAR	Opening Balance						
	Ist Quarter	_	12.56	12.56	_	_	12.56
	Iind Quarter	12.56	-	12.56	0.36	_	12.56
	IIIrd Quarter	12.56	-	12.56	0.36	-	12.56
	Ivth Quarter	12.56	-	12.56	0.36	-	12.56
					1.08	-	
IIND YEAR	Opening Balance						
	Ist Quarter	12.56	-	12.56	0.36	0.79	11.78
	Iind Quarter	11.78	-	11.78	0.34	0.79	10.99
	IIIrd Quarter	10.99	-	10.99	0.32	0.79	10.21
	Ivth Quarter	10.21		10.21	0.29	0.79	9.42
					1.31	3.14	
IIRD YEAR	Opening Balance						
	Ist Quarter	9.42	-	9.42	0.27	0.79	8.64
	Iind Quarter	8.64	-	8.64	0.25	0.79	7.85
	IIIrd Quarter	7.85	-	7.85	0.23	0.79	7.07
	Ivth Quarter	7.07		7.07	0.20	0.79	6.28
					0.95	3.14	
VTH YEAR	Opening Balance						
	Ist Quarter	6.28	-	6.28	0.18	0.79	5.50
	Iind Quarter	5.50	-	5.50	0.16	0.79	4.71
	IIIrd Quarter	4.71	-	4.71	0.14	0.79	3.93
	Ivth Quarter	3.93		3.93	0.11	0.79	3.14
					0.59	3.14	
VTH YEAR	Opening Balance						
	Ist Quarter	3.14	-	3.14	0.09	0.79	2.36
	Iind Quarter	2.36	-	2.36	0.07	0.79	1.57
	IIIrd Quarter	1.57	-	1.57	0.05	0.55	1.02
	Ivth Quarter	1.02		1.02	0.03	0.55	0.47
					0.23	2.67	

CALCULATION OF D.S.C.R

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
CASH ACCRUALS	16.70	17.74	18.49	18.05	17.49
	<u> </u>	'		'	
Interest on Term Loan	1.08	1.31	0.95	0.59	0.23
	·	<u> </u>		<u> </u>	
Total	17.78	19.05	19.43	18.64	17.72
	·	 '	<u> </u>	 '	
<u>REPAYMENT</u>		<u> </u>			
Instalment of Term Loan	3.14	3.14	3.14	2.67	2.67
Interest on Term Loan	1.08	1.31	0.95	0.59	0.23
Total	4.22	4.45	4.09	3.26	2.90
Total			=		
DEBT SERVICE COVERAGE R	4,21	4.28	4.75	5.72	6.10
AVERAGE D.S.C.R.		<u> </u>	5.01	 	

COMPUTATION OF SALE

Particulars	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
Op Stock	-	15,750.00	18,000.00	20,250.00	20,250.00
Production	1,57,500.00	1,80,000.00	2,02,500.00	2,02,500.00	2,02,500.00
	1,57,500.00	1,95,750.00	2,20,500.00	2,22,750.00	2,22,750.00
Less : Closing Stock	15,750.00	18,000.00	20,250.00	20,250.00	20,250.00
Net Sale	1,41,750.00	1,77,750.00	2,00,250.00	2,02,500.00	2,02,500.00
Sale Price per Average	20.00	20.00	20.00	20.00	20.00
Sale (in Lacs)	28.35	35.55	40.05	40.50	40.50

COMPUTATION OF ELECTRICITY

COMPUTATION OF ELECTRICITY			
(A) POWER CONNECTION			
Total Working Hour per day	Hours	8	
Electric Load Required	HP	7	
Load Factor		0.7460	
Electricity Charges	per unit	8.00	
Total Working Days		300	
Electricity Charges (8 Hrs Per day)			1,00,262.40
Add : Minimim Charges (@ 10%)			
(B) D.G. SET			
No. of Working Days		300	days
No of Working Hours		_	Hour per day
Total no of Hour		-	1 ,
Diesel Consumption per Hour		8	
Total Consumption of Diesel		-	
Cost of Diesel		65.00	Rs. /Ltr
Total cost of Diesel		-	
Add : Lube Cost @15%		-	
Total		-	
Total cost of Power & Fuel at 100%			1.00
Year	Capacity		Amount
	2 ,		(in Lacs)
IST YEAR	70%		0.70
IIND YEAR	80%		0.80
IIIRD YEAR	90%		0.90
IVTH YEAR	90%		0.90
VTH YEAR	90%		0.90

BREAK EVEN POINT ANALYSIS

Year	I	II	Ш	IV	٧
Net Sales & Other Income	28.35	35.55	40.05	40.50	40.50
Less : Op. WIP Goods	-	2.52	2.88	3.24	3.24
Add : Cl. WIP Goods	2.52	2.88	3.24	3.24	3.24
Total Sales	30.87	35.91	40.41	40.50	40.50
Variable & Semi Variable Exp.					
variable & Sellii Variable Exp.					
Raw Material & Tax	3.23	3.70	4.16	4.16	4.16
Electricity Exp/Coal Consumption at 85%	0.60	0.68	0.77	0.77	0.77
Manufacturing Expenses 80%	0.45	0.85	0.96	0.97	0.97
Wages & Salary at 60%	4.59	5.05	5.56	6.11	6.73
Selling & adminstrative Expenses 80%	0.45	0.57	0.64	0.65	0.65
Intt. On Working Capital Loan	0.36	0.36	0.36	0.36	0.36
Total Variable & Semi Variable Exp	9.69	11.22	12.45	13.02	13.63
Contribution	21.18	24.69	27.96	27.48	26.87
Fixed & Semi Fixed Expenses					
rixeu & Seiiii rixeu Expenses					
Manufacturing Expenses 20%	0.11	0.21	0.24	0.24	0.24
Electricity Exp/Coal Consumption at 15%	0.11	0.12	0.14	0.14	0.14
Wages & Salary at 40%	3.06	3.37	3.71	4.08	4.48
Interest on Term Loan	1.08	1.31	0.95	0.59	0.23
Depreciation	1.77	1.55	1.34	1.16	1.00
Selling & adminstrative Expenses 20%	0.11	0.14	0.16	0.16	0.16
Total Fixed Expenses	6.25	6.71	6.53	6.36	6.26
Consolit. Hilliophian		0001	0001	0001	0001
Capacity Utilization	70%	80%	90%	90%	90%
OPERATING PROFIT	14.93 21%	17.99 22%	21.43 21%	21.12 21%	20.61 21%
BREAK EVEN POINT			9.43	9.37	9.43
BREAK EVEN SALES	9.11	9.75	9.43	9.37	9.43

PLANT & MACHINERY

PARTICULARS	QTY.	RATE	AMOUNT IN RS.
25 Cmx50 Cm Mixing Mill with all accessories	1	3,84,000.00	3,84,000.00
Double Roll Spreading Machine	1	2,70,000.00	2,70,000.00
Slitting Machine	1	54,000.00	54,000.00
Sigma Mixer	1	54,000.00	54,000.00
Misc. tools & equipments	1	60,000.00	60,000.00
H.V. Break Down Tester, Laboratory Oven, adhesion Test & Pin hole testing equipments			
adhesion rest & Fin hole testing equipments	1	78,000.00	78,000.00
Total			9,00,000.00



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