

PROJECT REPORT

Of

PEPPERMINT OIL

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding **Peppermint Oil**.

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 : xxxxxxxxxx
- 2 Constitution (legal Status) : xxxxxxxxxx
- 3 Father / Spouse Name : xxxxxxxxxxxxxx
- 4 Unit Address : xxxxxxxxxxxxxxxxxxxxxxxxxx
- District : xxxxxxxx
Pin: xxxxxxxx State: xxxxxxxxxx
Mobile xxxxxxxx
- 5 Product and By Product : **PEPPERMINT OIL**
- 6 Name of the project / business activity proposed : **PEPPERMINT OIL MANUFACTURING UNIT**
- 7 Cost of Project : Rs.19.44 Lakhs
- 8 Means of Finance
Term Loan Rs.12 Lakhs
Own Capital Rs.1.94 Lakhs
Working Capital Rs.5.5 Lakhs
- 9 Debt Service Coverage Ratio : 2.60
- 10 Pay Back Period : 5 Years
- 11 Project Implementation Period : 5-6 Months
- 12 Break Even Point : 42%
- 13 Employment : 13 Persons
- 14 Power Requirement : 10 HP
- 15 Major Raw materials : Peppermint shoot and Packing material
- 16 Estimated Annual Sales Turnover (Max Utilized Capacity) : 121.69 Lakhs
- 17 Detailed Cost of Project & Means of Finance

COST OF PROJECT

(Rs. In Lakhs)

Particulars	Amount
Land	Own/Rented
Building /Shed 1500 Sq ft	9.00
Plant & Machinery	3.50
Furniture & Fixtures	0.83
Working Capital	6.11
Total	19.44

MEANS OF FINANCE

Particulars	Amount
Own Contribution	1.94
Term Loan	12.00
Working Capital	5.50
Total	19.44

PEPPERMINT OIL

PRODUCT INTRODUCTION:

Peppermint (Japanese Mint-Menta Japonesa), is a medicinal plant that has received more attention from both food and pharmaceutical industries because of its health benefits for human society. Peppermint oil is the essence of peppermint extracted into an oil. Some peppermint oils are stronger than others. The strongest types are made using modern distillation techniques and are called essential oils. Peppermint essential oil is the most common type of peppermint oil available for purchase. It can be used for health, beauty, and cleaning purposes. Peppermint contains a compound called menthol. Menthol is responsible for many of the benefits of peppermint oils. Menthol also gives peppermint its taste, smell, and cooling sensation. Peppermint oil is derived from extraction of oils from leaves and stem (shoot) of peppermint herb. The steam distillation process is used for extraction of oil.



USES & MARKET POTENTIAL:

Some people use peppermint oil as part of their beauty and hair care regimen. Its fragrance is pleasant and popularly found in shampoos, skin creams, and other products. While peppermint oil may be known for some skin care benefits, it's also good for your hair and scalp. It may help with dryness, itching, or other scalp problems. Peppermint menthol also imparts a freshened smell and tingly sensation on the skin and scalp. Peppermint oil is used medicines due to its therapeutic benefits.

The healthcare uses of peppermint oil include digestive system stimulation and for soothing headaches, muscle pain, cold, sinus etc. They are used extensively in oral care products because of cooling effect and its ability to kill bacteria responsible for bad breath.

The rise in demand for aromatherapy treatments is expected to drive the growth of global peppermint oil market. The increasing consumer awareness regarding the use of safe natural and organic products is expected to boost the growth of global peppermint oil market. The overall demand for essential oil has been on the rise over the past few years which is attributable to the rising awareness about the health benefits associated with the product. An ever-increasing global population, rapid urbanisation, a growing pharmaceutical sector, and rising geriatric population are some of the significant factors that are influencing a steady shift in consumer preferences.

MACHINERY REQUIREMENT:

Basic machinery requirement are as follows:

1. Heating Vessel
2. Condenser
3. Steam Pipe
4. Separator
5. Water Pump
6. Cooling Tower
7. Water Tank
8. Filling Machine

RAW MATERIAL:

Basic raw material requirements are as follows:

1. Peppermint Shoot (Stem and Leaves)
2. Packing Material (Bottles)

EXTRACTION PROCESS:

The Peppermint Shoots are purchased from farmers and stored temporarily in a shaded area; it acts as a raw material inventory for distillation unit. The steam and water distillation methods are generally employed to perform a simple distillation process.

The Peppermint Shoot are boiled with water in a heating vessel and are boiled for 20 to 40 minutes for optimal extraction, during this period the steam generated carries along with-it Peppermint Oil as it also gets vaporized from within shoot of plant.

This steam is transferred to condenser via steam pipe, as condenser is circulated with cooling water continuously utilizing a pump, thus steam transferred to condenser undergoes condensation completing distillation process, while used cooling water is sent to cooling tower where it undergoes evaporative cooling to lower its temperature and become reusable for cooling.

The cooled water in cooling tower sump is replenished periodically with make-up water from another water tank, if required via a make-up water pump to make up for evaporated water in evaporative cooling.

The contents (Water + Peppermint Oil) obtained from condenser are supplied to separator and then the liquid is allowed to settle down and as oil and water are immiscible, water settles below while Peppermint Oil settles above water layer.

A valve is located at bottom of the separator which is used to drain almost all the water from separator, this water is supplied back to heating vessel for enrichment purpose. The enrichment process continues for 20 to 40min, after which most of the Peppermint oil is extracted and it's not feasible to go after the remainder of portion.

Now water is completely drained from separator and oil is supplied to a filling machine. The filling machine fills the Peppermint oil in appropriately sized bottles which can range from 10ml to 500ml and machine setting are made accordingly.

PROJECTED PROFITABILITY STATEMENT

PARTICULARS	I	II	III	IV	V
<u>A) SALES</u>					
Gross Sale	69.17	82.48	94.56	107.62	121.69
Total (A)	69.17	82.48	94.56	107.62	121.69
<u>B) COST OF SALES</u>					
Raw Mateiral Consumed	37.49	43.31	49.61	56.43	63.82
Electricity Expenses	1.12	1.23	1.34	1.46	1.57
Repair & Maintenance	0.35	0.41	0.47	0.54	0.61
Labour & Wages	10.76	11.83	13.02	14.32	15.75
Depreciation	1.51	1.33	1.18	1.04	0.92
Cost of Production	51.22	58.11	65.62	73.78	82.67
Add: Opening Stock /WIP	-	1.71	1.88	2.12	2.39
Less: Closing Stock /WIP	1.71	1.88	2.12	2.39	2.67
Cost of Sales (B)	49.52	57.94	65.38	73.52	82.38
C) GROSS PROFIT (A-B)	19.65	24.54	29.19	34.10	39.32
	28.41%	29.75%	30.87%	31.69%	32.31%
D) Bank Interest (Term Loan)	1.30	1.06	0.77	0.48	0.18
ii) Interest On Working Capital	0.60	0.60	0.60	0.60	0.60
E) Salary to Staff	8.58	9.44	10.38	11.42	12.56
F) Selling & Adm Expenses Exp.	6.92	9.90	11.35	12.91	14.60
TOTAL (D+E)	17.40	21.00	23.10	25.42	27.95
H) NET PROFIT	2.25	3.53	6.08	8.69	11.36
	3.2%	4.3%	6.4%	8.1%	9.3%
I) Taxation	-	-	0.05	0.18	0.32
J) PROFIT (After Tax)	2.25	3.53	6.03	8.50	11.04

PROJECTED CASH FLOW STATEMENT

PARTICULARS	I	II	III	IV	V
<u>SOURCES OF FUND</u>					
Own Contribution	1.94	-			
Net Profit	2.25	3.53	6.08	8.69	11.36
Depreciation & Exp. W/off	1.51	1.33	1.18	1.04	0.92
Increase In Cash Credit	5.50				
Increase In Term Loan	12.00	-	-	-	-
Increase in Creditors	0.62	0.10	0.11	0.11	0.12
TOTAL :	23.82	4.96	7.37	9.84	12.40
<u>APPLICATION OF FUND</u>					
Increase in Fixed Assets	13.33	-	-	-	-
Increase in Stock	3.46	0.44	0.54	0.58	0.63
Increase in Debtors	3.46	0.67	0.60	0.65	0.70
Repayment of Term Loan	1.33	2.67	2.67	2.67	2.67
Taxation	-	-	0.05	0.18	0.32
Drawings	1.25	2.00	3.00	5.00	8.00
TOTAL :	22.83	5.78	6.86	9.09	12.32
Opening Cash & Bank Balance	-	0.99	0.17	0.68	1.43
Add : Surplus	0.99	- 0.82	0.50	0.76	0.08
Closing Cash & Bank Balance	0.99	0.17	0.68	1.43	1.52

PROJECTED BALANCE SHEET

PARTICULARS	I	II	III	IV	V
<u>SOURCES OF FUND</u>					
<u>Capital Account</u>					
Opening Balance	-	2.94	4.47	7.50	11.01
Add: Additions	1.94	-	-	-	-
Add: Net Profit	2.25	3.53	6.03	8.50	11.04
Less: Drawings	1.25	2.00	3.00	5.00	8.00
Closing Balance	2.94	4.47	7.50	11.01	14.05
CC Limit	5.50	5.50	5.50	5.50	5.50
Term Loan	10.66	8.00	5.33	2.67	-
Sundry Creditors	0.62	0.72	0.83	0.94	1.06
TOTAL :	19.73	18.69	19.16	20.11	20.61
<u>APPLICATION OF FUND</u>					
Fixed Assets (Gross)	13.33	13.33	13.33	13.33	13.33
Gross Dep.	1.51	2.84	4.01	5.05	5.97
Net Fixed Assets	11.82	10.49	9.32	8.28	7.36
Current Assets					
Sundry Debtors	3.46	4.12	4.73	5.38	6.08
Stock in Hand	3.46	3.90	4.44	5.02	5.65
Cash and Bank	0.99	0.17	0.68	1.43	1.52
TOTAL :	19.73	18.69	19.16	20.11	20.61
	-	-	-	-	-

COMPUTATION OF PEPPERMINT OIL MANUFACTURING UNIT**Items to be Manufactured PEPPERMINT OIL**

Manufacturing Capacity per Day		10.00	kg
No. of Working Hour		8	
No of Working Days per month		25	
No. of Working Day per annum		300	
Total Production per Annum		3,000	kg
Total Production per Annum		3,180.00	Ltr
Total Production per Annum		31,800.00	100 ml Bottles
Year		Capacity	PEPPERMINT OIL
		Utilisation	
I		50%	15,900
II		55%	17,490
III		60%	19,080
IV		65%	20,670
V		70%	22,260

COMPUTATION OF RAW MATERIAL

Item Name	Quantity of Raw Material	Unit	Unit Rate of	Total Cost Per Annum (100%)
Raw Material Consumed	500	tonne	15,000	7,500,000
Total	500.00			7,500,000.00

Total Raw material in Rs lacs at 100% Capacity 75.00
 Cost per 100 ml Bottle (In Rs) **235.80**

Raw Material Consumed	Capacity Utilisation	Rate	Amount (Rs.)
I	50%	235.80	37.49
II	55%	247.60	43.31
III	60%	260.00	49.61
IV	65%	273.00	56.43
V	70%	286.70	63.82

COMPUTATION OF SALE

Particulars	I	II	III	IV	V
Op Stock	-	530.00	583.00	636.00	689.00
Production	15,900.00	17,490.00	19,080.00	20,670.00	22,260.00
	15,900.00	18,020.00	19,663.00	21,306.00	22,949.00
Less : Closing Stock(10 Days)	530.00	583.00	636.00	689.00	742.00
Net Sale	15,370.00	17,437.00	19,027.00	20,617.00	22,207.00
Sale Price per 100 ml Bottle	450.00	473.00	497.00	522.00	548.00
Sale (in Lacs)	69.17	82.48	94.56	107.62	121.69

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL

PARTICULARS	I	II	III	IV	V
Finished Goods					
(10 Days requirement)	1.71	1.88	2.12	2.39	2.67
Raw Material					
(14 Days requirement)	1.75	2.02	2.32	2.63	2.98
Closing Stock	3.46	3.90	4.44	5.02	5.65

COMPUTATION OF WORKING CAPITAL REQUIREMENT

Particulars	Amount	Margin(10%)	Net Amount
Stock in Hand	3.46		
Less:			
Sundry Creditors	0.62		
Paid Stock	2.83	0.28	2.55
Sundry Debtors	3.46	0.35	3.11
Working Capital Requirement			5.66
Margin			0.63
MPBF			5.66
Working Capital Demand			5.50

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	8,500.00	4	34,000.00
Helper	5,000.00	1	5,000.00
Security Guard	7,500.00	1	7,500.00
			81,500.00
Add: 10% Fringe Benefit			8,150.00
Total Labour Cost Per Month			89,650.00
Total Labour Cost for the year (In Rs. Lakhs)		8	10.76

BREAK UP OF SALARY

Particulars	Salary	No of	Total
	Per Month	Employees	Salary
Accountant cum store keeper	15,000.00	1	15,000.00
Administrative Staffs	12,500.00	4	50,000.00
Total Salary Per Month			65,000.00
Add: 10% Fringe Benefit			6,500.00
Total Salary for the month			71,500.00
Total Salary for the year (In Rs. Lakhs)		5	8.58

COMPUTATION OF DEPRECIATION

Description	Land	Building/shed	Plant & Machinery	Furniture	TOTAL
Rate of Depreciation		10.00%	15.00%	10.00%	
Opening Balance	Own/Rented		-	-	-
Addition	-	9.00	3.50	0.83	13.33
	-	9.00	3.50	0.83	13.33
TOTAL		9.00	3.50	0.83	13.33
Less : Depreciation	-	0.90	0.53	0.08	1.51
WDV at end of Ist year	-	8.10	2.98	0.75	11.82
Additions During The Year	-	-	-	-	-
	-	8.10	2.98	0.75	11.82
Less : Depreciation	-	0.81	0.45	0.07	1.33
WDV at end of IIInd Year	-	7.29	2.53	0.67	10.49
Additions During The Year	-	-	-	-	-
	-	7.29	2.53	0.67	10.49
Less : Depreciation	-	0.73	0.38	0.07	1.18
WDV at end of IIIrd year	-	6.56	2.15	0.61	9.32
Additions During The Year	-	-	-	-	-
	-	6.56	2.15	0.61	9.32
Less : Depreciation	-	0.66	0.32	0.06	1.04
WDV at end of IV year	-	5.90	1.83	0.54	8.28
Additions During The Year	-	-	-	-	-
	-	5.90	1.83	0.54	8.28
Less : Depreciation	-	0.59	0.27	0.05	0.92
WDV at end of Vth year	-	5.31	1.55	0.49	7.36

REPAYMENT SCHEDULE OF TERM LOAN

11.0%

Year	Particulars	Amount	Addition	Total	Interest	Repayment	CI Balance
I	Opening Balance						
	Ist Quarter	-	12.00	12.00	0.33	-	12.00
	IInd Quarter	12.00	-	12.00	0.33	-	12.00
	IIIRD Quarter	12.00	-	12.00	0.33	0.67	11.33
	Ivth Quarter	11.33	-	11.33	0.31	0.67	10.66
					1.30	1.33	
II	Opening Balance						
	Ist Quarter	10.66	-	10.66	0.29	0.67	10.00
	IInd Quarter	10.00	-	10.00	0.27	0.67	9.33
	IIIRD Quarter	9.33	-	9.33	0.26	0.67	8.66
	Ivth Quarter	8.66		8.66	0.24	0.67	8.00
					1.06	2.67	
III	Opening Balance						
	Ist Quarter	8.00	-	8.00	0.22	0.67	7.33
	IInd Quarter	7.33	-	7.33	0.20	0.67	6.67
	IIIRD Quarter	6.67	-	6.67	0.18	0.67	6.00
	Ivth Quarter	6.00		6.00	0.16	0.67	5.33
					0.77	2.67	
IV	Opening Balance						
	Ist Quarter	5.33	-	5.33	0.15	0.67	4.67
	IInd Quarter	4.67	-	4.67	0.13	0.67	4.00
	IIIRD Quarter	4.00	-	4.00	0.11	0.67	3.33
	Ivth Quarter	3.33		3.33	0.09	0.67	2.67
					0.48	2.67	
V	Opening Balance						
	Ist Quarter	2.67	-	2.67	0.07	0.67	2.00
	IInd Quarter	2.00	-	2.00	0.05	0.67	1.33
	IIIRD Quarter	1.33	-	1.33	0.04	0.67	0.67
	Ivth Quarter	0.67		0.67	0.02	0.67	0.00
					0.18	2.67	

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
<u>CASH ACCRUALS</u>	3.75	4.86	7.21	9.54	11.96
Interest on Term Loan	1.30	1.06	0.77	0.48	0.18
Total	5.06	5.93	7.98	10.02	12.15
<u>REPAYMENT</u>					
Repayment of Term Loan	1.33	2.67	2.67	2.67	2.67
Interest on Term Loan	1.30	1.06	0.77	0.48	0.18
Total	2.63	3.73	3.44	3.14	2.85
DEBT SERVICE COVERAGE RAT	1.92	1.59	2.32	3.19	4.26
AVERAGE D.S.C.R.			2.60		

COMPUTATION OF ELECTRICITY**(A) POWER CONNECTION**

Total Working Hour per day	Hours	8	
Electric Load Required	HP	10	
Load Factor		0.7460	
Electricity Charges	per unit	7.50	
Total Working Days		300	
Electricity Charges			1.34
Add : Minimim Charges (@ 10%)			

(B) DG set

No. of Working Days		300	days
No of Working Hours		0.5	Hour per day
Total no of Hour		150	
Diesel Consumption per Hour		8	
Total Consumption of Diesel		1,200	
Cost of Diesel		65.00	Rs. /Ltr
Total cost of Diesel		0.78	
Add : Lube Cost @ 15%		0.12	
Total		0.90	

Total cost of Power & Fuel at 100% 2.24

Year	Capacity	Amount (in Lacs)
I	50%	1.12
II	55%	1.23
III	60%	1.34
IV	65%	1.46
V	70%	1.57

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.