

MANUFACTURE OF SHAMPOO

Introduction:

Shampoo is defined as a preparation of a surfactant (surface active material) in suitable form liquid solid or power which when used under the conditions specified will remove surface grease, dirt and skin debris from the hair shaft and scalp without affecting adversely the hair, scalp or health of the user.

Shampoos are of various types and forms on the basis of physical appearances, constituents and properties. Various forms are as under:

- Liquid clear shampoos.
- Liquid cream or cream lotion shampoos.
- Cream paste shampoos.
- Egg shampoos.
- Dry shampoos & liquid dry shampoos.
- Baby shampoos.

Market Potential:

With the raise in the standard of living & health consciousness of people the demand for cosmetics is growing very fast. Shampoo is one of such cosmetic products which find application in every household (both urban & rural household). Demand is still growing very fast as smaller sizes (sachet type) are vigorously promoted by the leading manufacturers and selling it even in the smaller roadside panshops. Thus for cleaning & conditioning of hairs shampoos have largely replaced normal bath soap with the different requirement for different types of hairs viz. Dry, Oil, and normal wide varieties of shampoos are in demand. Besides this shampoos fortified with protein sources like egg and almond etc show exclusive demand.

Plant Capacity:

The production basis for a typical tiny unit would be as under:

Working hours/day	: 8 (1 shift)
Working days in a year	: 300
Annual Production capacity	: 1.50 lakh liters of shampoo.

The unit has been assumed to operate at 70%, 80% and 90% of its installed capacity in the first, second and third year and onwards of its operation.

Raw Material:

The main raw materials required are provided below:

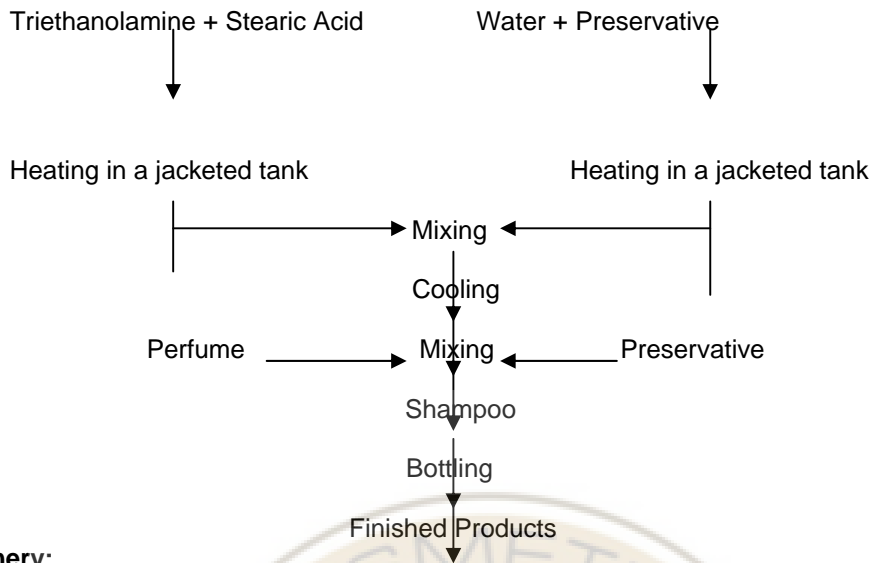
- Triethanolamine Lanvyl Sulfate
- Sulphofated castor oil
- Ethyl Alcohol.
- Oleic acid/Stearic acid.
- Coconut oil.
- Colour, perfumes & preservations.

The above raw materials can be procured through local dealer in Guwahati and from Kolkata.

Process:

For preparing liquid shampoo, Triethanolamine lauvyl sulfate, stearic acid are heated to about 65°C. Water & preservatives are also heated to 65°C. Both the solutions are mixed together and then cooled. Perfumes are added after that. The shampoo thus prepared is bottled by automatic bottle filling machine.

Process Flow Chart



Machinery:

The major equipment required for manufacture of shampoo are as follows:

- S.S. 304 open tank with slow speed stirrer for shampoo – 1 No.
- Mixing machine – 1 No.
- Cooling machine – 1 No.
- Bottle filling and sealing machine – 1 No.

Location:

The suitable locations for the project may be –

- Guwahati & Tinsukia in Assam
- Shillong in Meghalaya.
- Dimapur in Nagaland.
- Agartala in Tripura.

Infrastructure:

The basic infrastructure required are :

Land	:	6,000 sq.ft.
Building	:	2,000 sq.ft.
Power	:	20 KW
Water	:	2,000 Ltr. Per day.
Manpower	:	15 Nos. (Administrative (5), Factory Staff (10),

Total Capital Requirement:

The total capital requirement including fixed capital and working capital is estimated at Rs 39.50 lakhs as follows. Of this, the project cost comprising fixed capital and margin money on working capital is Rs 26.50 lakhs.

		(Rs in lakh)
A. Fixed Capital:		
Land		Rented
Building		Rented
Machinery		15.00
Miscellaneous fixed assets		3.00
Preliminary and pre-operative expenses		<u>2.00</u>
	Total (A)	20.00
		=====
B. Working Capital:		
Raw materials & Packing material	2 weeks	6.00
Finished goods	1 week	6.00
Working expenses	1 month	1.00
Receivables	1 week	<u>6.50</u>
	Total (B)	19.50
		=====
	Total (A)+(B)	39.50

Note: Working capital may be financed as:

Bank Finance	Rs 13.00 lakhs
Margin Money	<u>Rs 6.50 lakhs</u>
		<u>Rs 19.50 lakhs</u>

Means of Finance:

The project cost of Rs 26.50 lakhs including margin money for working capital may be financed as under:

Promoter's contribution (35%)	Rs 9.30 lakhs
Term Loan (65%)	<u>Rs 17.20 lakhs</u>
		<u>Rs 26.50 lakhs</u>
		=====

Operating Expenses:

The annual operating expenses are estimated at Rs 295.90 lakhs (70% capacity utilization) as given below:

		(Rs in lakhs)
1.	Raw materials & consumables	274.00
2.	Utilities	2.40
3.	Wages & Salaries	7.50
4.	Overheads	1.80
5.	Selling expenses @ 1.5% on annual sales	4.70
6.	Interest on term loan (13.50%)	2.30
7.	Interest on Bank Finance for working capital(13%)	1.70
8.	Depreciation @10%	<u>1.50</u>
		295.90
		=====

Sales Realization:

The basis on which average ex-factory sales realization from the sale of shampoo is based is provided below:

Items	Qty.(Ltrs)	Unit Sales Price (Rs per ltr.)	Annual Sales Price (Rs)
Shampoo	1,50,000	300/-	450,00,000

Based on this the annual sales realization is estimated to be Rs 450.00 lakhs and at 70% capacity utilization the same is Rs 315.00 lakhs.

Profitability :

Based on the sales realization and the operating expenses, the profit would be Rs 19.10 lakhs per year (70% capacity utilization). This works out to a return on investment of 75%. The plant will break even at 40% of the rated capacity.

Highlight:

The major highlights of the project are as follows:

Total capital requirement	:	Rs 39.50 lakhs
Promoter's contribution	:	Rs 9.30 lakhs
Annual sales realization (70% cap.)	:	Rs 315.00 lakhs
Annual operating expenses (70% cap.)	:	Rs 295.90 lakhs
Annual profit (pre-tax)	:	Rs 19.10 lakhs
Pre-tax Return on Sales	:	7%
Break Even Point	:	40%
No.of persons employed	:	15

List of Machinery Suppliers:**List of Raw Materials Suppliers:**

1.	M/s Chemi Tex Engineers, 13, Laxmi Co-op Industrial Estate, Near Nagarvel Hanuman mandir, Amvaiwadi, Ahmedabad – 380 026	1.	From local dealers in Guwahati
2.	M/s Industrial Machinery Mfg.Pvt.Ltd., 3607 to 3609, GIDC Estate, Phase-IV Ahmedabad Highway, Vatva, Ahmedabad- 382 445		

