

TOMATO SAUCE AND KETCHUP

1. INTRODUCTION

Tomato sauce and ketchup are commonly consumed commodities in every household. It is liked by one and all because of its sweet sour taste. Tomato sauce is bottled in 500 ml capacity.

2. MARKET

The major market outlets are the "A" and "B" class stores. The product also finds placement in self service counters and departmental stores. Bakeries also sell tomato sauce and ketchup.

3. MANUFACTURING PROCESS

Ripe tomatoes are taken. Green and unripe tomatoes are discarded as it would discolour the final product. The tomatoes are first washed. Mere rinsing of tomatoes is not enough because mold filaments and other micro-organisms found in their cracks and wrinkle folds and stem cavities are not easily dislodged. After washing, the tomatoes are trimmed, cut into small pieces before boiling. The tomato pieces are boiled in their own juice in steam jacketed kettles for 3 to 5 minutes to facilitate pulping. The juice is extracted by passing the cooked tomatoes through a pulper. The juice normally contains solids at 5.66% and a specific gravity of 1.024.

The ketchup is prepared by concentrating the juice obtained from the pulper. Spices, salt, sugar, vinegar, onions, garlic, etc are to be added to the extent, it contains not less than 12% tomato solids and 28% total solids. The following recipe is used to manufacture ketchup.

The spices are loosely tied in a muslin bag and is placed in the juice and boiled till the desired consistency is obtained. Add sugar and salt to the vinegar and stir. Add the mix to the ketchup and stir thoroughly to form a homogenous mass.

When the ketchup has been cooked, it is passed through a sieve to remove any fibrous material or external contaminants. The ketchup should be bottled at 190 degrees Fahrenheit to prevent darkening of its colour and loss of vitamin contents during storage. On cooling, the ketchup shrinks in volume, producing thereby a high degree of vacuum in the bottle. Sometimes a black ring is formed on the surface of the ketchup bottle. This is known as "black neck". It is because of the oxidation of the iron compounds which enter into the ketchup from the boiling equipment and from the metal of the cap through the action of acetic acid.

4. PRODUCTION CAPACITY PER ANNUM

Capacity

300000 Kgs per annum

Selling Price

Rs.

33 per

bottle of
ml

5. PROJECT COST/CAPITAL INVESTMENT

S.No	Description	Amount Rs.
1	Preliminary & Preoperative Expns	10000
2	Fixed Capital	81500
3	Working Capital for 2 month(s)	1505000
	Total Project Cost	1596500

6. MEANS OF FINANCE

S.No	Description	%age	Amount Rs.
1	Promoter Contribution	15%	239475
2	Subsidy	20%	319300
3	Term Loan	65%	1037725
	Total		1596500

7. FINANCIAL ASPECTS

A. FIXED CAPITAL

i. Land and Buildings

Rented

8000 per month

ii. Machinery and Equipment

S.No	Description	Qty.	Rate	Amount Rs.
1	Fruit Washing Tank	1	5000	5000
2	Juice Extractor or pulper	1	25000	25000
3	Steam jacketed kettle	1	34000	34000
4	Stirrer	1	12500	12500
5	Installation and misc. Items			5000
	Total			81500

B. WORKING CAPITAL

i. Salaries & Wages (per month)

S.No	Description	Nos.	Sal/mon.	Amount Rs.
1	Production Manager/Entrepreneur	1	5000	5000
2	Chemist	1	4000	4000
3	Administrative Staff	1	3000	3000
4	Skilled Labour	1	3000	3000
5	Semi-skilled Labour	3	2500	7500
6	Unskilled Labour	3	2000	6000
	Total			28500

ii. Raw Material (per month)

S.No	Description	Unit	Qty.	Rate	Amount Rs.
1	Tomatoes	Kgs	100000	5	500000
2	Sugar	Kgs	600	15	9000
3	Vinegar, salt, spices	Kgs	1200	60	72000
4	Colour, preservatives	Kgs	25	200	5000
5	Pet bottles of 500 ml		25000	4	100000
6	Cartons and straps		100	20	2000
	Total				688000

iii. Utilities (per month)

S.No	Description	Unit	Amount Rs.
1	Power	LS	4000
2	Fuel for boiler		15000
3	Water	LS	2000
	Total		21000

iv. Other Expenses (per month)

S.No	Description	Amount Rs.
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1	Postage & Stationery Expenses	1000
2	Transportation Expenses	1000
3	Advertisement Expenses	1000
4	Consumable Stores	1000
5	Repairs & Maintenance	2000
6	Miscellaneous Expenses	1000
	Total	7000

v. Total Working Capital (per month)

S.No	Description	Amount Rs.
1	Rent	8000
2	Salaries and Wages	28500
3	Raw Material	688000
4	Utilities	21000
5	Other Expenses	7000
	Total	752500

8. COST OF PRODUCTION (PER ANNUM)

S.No	Description	Amount Rs.
1	Total Working Capital	9030000
2	Depreciation @ 15%	12225
3	Interest @ 12%	124527
	Total	9166752

9. TURNOVER (PER YEAR)

S.No	Description	Unit	Qty.	Rate Rs.	Amount Rs.
1		Kgs per annu	300000	33	9900000
	Total				9900000

10. FIXED COST (PER YEAR)

S.No	Description	Amount Rs.
1	Depreciation	12225
2	Interest	124527
3	Rent	96000
4	Salaries & Wages @ 40%	136800
5	Other Expenses incl. Utilities @ 40%	134400
	Total	503952

11. PROFIT ANALYSIS & RATIOS

1	Net Profit	Rs.	733248
2	Percentage of Profit on Sales		7%
3	Percentage of Return on Investment		46%
4	Break Even Point		41%