

Methyl Isobutyl Ketone (MIBK) from Acetone

(Used as a solvent for gums, resins, paints, varnishes, lacquers, and nitrocellulose)

Manufacturing Plant, Detailed Project Report, Profile, Business Plan, Industry Trends, Market Research, Survey, Survey, Manufacturing Process, Machinery, Raw Materials, Materials, Feasibility Study, Investment Opportunities, Cost Cost and Revenue, Plant Economics, Production Schedule, Schedule, Working Capital Requirement, Plant Layout, Process Flow Sheet, Cost of Project, Projected Balance Sheets, Profitability Ratios, Break Even Analysis

Introduction

Methyl isobutyl ketone (MIBK) is a colorless liquid with an odor similar to mothballs. MIBK is also known as 4-methyl-2-pentanone, hexane and isopropylacetone. While it is usually in liquid form, MIBK can change into a gas. MIBK will dissolve in water, alcohols, benzenes and ethers.

Methyl isobutyl ketone (MIBK) [CAS registry number: 108-10-1] is an organic compound with the formula $(\text{CH}_3)_2\text{CHCH}_2\text{C}(\text{O})\text{CH}_3$. This colorless liquid, a ketone, is widely used as a solvent.

MIBK is a colorless liquid with a characteristic ketone odor. It is highly flammable and vapors may travel to the source of ignition and flashback. It is soluble in water and miscible with most organic solvents and evaporates in air. It irritates the skin, eyes and respiratory tract and in high concentrations leads to nausea, headaches, dizziness and unconsciousness. MIBK is a clear liquid with a sweet odor; the odor threshold is 1.64-mg/m³ (0.4 ppm). It is moderately soluble in water. MIBK can react violently with oxidizing and reducing agents. When heated, peroxides may form by auto-oxidation and may explode spontaneously

Methyl isobutyl ketone is used in a number of industrial applications. The primary use of methyl isobutyl ketone, accounting for approximately 62 percent of all use, is as a solvent in protective coatings. It is also used as a solvent in specialty adhesives; in ink formulations; in dewaxing mineral oil; and in textile coatings and leather finishing. As a process solvent methyl isobutyl ketone is used in the separation and purification of certain metal ions, such as zirconium from hafnium; in the extraction and purification of antibiotics and other pharmaceuticals; and in the manufacture of insecticides and other pesticides. It is also used in purifying stearic acid; refining tall oil; and extracting rosin from softwood, especially pine.

PROJECT AT A GLANCE

COST OF PROJECT				MEANS OF FINANCE			
Particulars	Existing	Proposed	Total	Particulars	Existing	Proposed	Total
Land & Site Development Exp.	0.00	91.80	91.80	Capital	0.00	2450.52	2450.52
Buildings	0.00	1799.00	1799.00	Share Premium	0.00	0.00	0.00
Plant & Machineries	0.00	5360.00	5360.00	Other Type Share Capital	0.00	0.00	0.00
Motor Vehicles	0.00	30.00	30.00	Reserves & Surplus	0.00	0.00	0.00
Office Automation Equipments	0.00	922.00	922.00	Cash Subsidy	0.00	0.00	0.00
Technical Knowhow Fees & Exp.	0.00	350.00	350.00	Internal Cash Accruals	0.00	0.00	0.00
Franchise & Other Deposits	0.00	0.00	0.00	Long/Medium Term Borrowings	0.00	7351.55	7351.55
Preliminary & Pre-operative Exp	0.00	10.00	10.00	Debentures / Bonds	0.00	0.00	0.00
Provision for Contingencies	0.00	450.00	450.00	Unsecured Loans/Deposits	0.00	0.00	0.00
Margin Money - Working Capital	0.00	789.26	789.26				
TOTAL	0.00	9802.06	9802.06	TOTAL	0.00	9802.06	9802.06

PROJECT AT A GLANCE

Year	Annualised		Book Value	Debt	Dividend	Retained Earnings		Payout	Probable Market Price	P/E Ratio	Yield Price/ Book Value
	EPS	CEPS	Per Share		Per Share	Per Share				No.of Times	
	Rs	Rs	Rs	Rs	Rs	%	Rs	%	Rs		%
1-2	504.31	987.20	514.31	2400.00	0.00	100.00	504.31	0.00	504.31	1.00	0.00
2-3	775.78	1193.62	1290.09	1800.00	0.00	100.00	775.78	0.00	775.78	1.00	0.00
3-4	1047.53	1409.64	2337.62	1200.00	0.00	100.00	1047.53	0.00	1047.53	1.00	0.00
4-5	1312.35	1626.67	3649.97	600.00	0.00	100.00	1312.35	0.00	1312.35	1.00	0.00
5-6	1567.51	1840.81	5217.48	0.00	0.00	100.00	1567.51	0.00	1567.51	1.00	0.00

PROJECT AT A GLANCE

Year	D. S. C. R.			Debt / - Deposits Debt	Equity as- Equity	Total Net Worth	Return on Net Worth	Profitability Ratio					Assets Turnover Ratio	Current Ratio
	Individu al	Cumulati ve	Overall					GPM	PBT	PAT	Net Contribu tion	P/V Ratio		
	(Number of times)			(Number of times)		%	%	%	%	%		%		
Initial				3.00	3.00									
1-2	1.42	1.42		1.60	1.60	2.88		8.06%	4.40%	3.35%	8052.12	21.82%	2.63	1.04
2-3	1.69	1.55		0.79	0.79	1.77		9.46%	6.52%	4.42%	9316.67	21.64%	2.83	1.25
3-4	2.03	1.69	2.03	0.36	0.36	1.13		10.39%	8.03%	5.22%	10645.78	21.64%	2.88	1.48
4-5	2.43	1.85		0.13	0.13	0.75		11.02%	9.11%	5.81%	11974.88	21.63%	2.82	1.73
5-6	2.92	2.03		0.00	0.00	0.51		11.44%	9.87%	6.25%	13303.99	21.63%	2.69	2.38

PROJECT AT A GLANCE

BEP	
BEP - Maximum Utilisation Year	5
Cash BEP (% of Installed Capacity)	49.24%
Total BEP (% of Installed Capacity)	54.27%
IRR, PAYBACK and FACR	
Internal Rate of Return .. (In %age)	27.69%
Payback Period of the Project is (In Years)	2 Years 3 Months
Fixed Assets Coverage Ratio (No. of times)	13.310

Major Queries/Questions Answered in the Report?

1. **What is Methyl isobutyl Ketone (MIBK) industry ?**
2. **How has the Methyl isobutyl Ketone (MIBK) industry performed so far and how will it perform in the coming years ?**
3. **What is the Project Feasibility of a Methyl isobutyl Ketone (MIBK) from Acetone Plant ?**
4. **What are the requirements of Working Capital for setting up a Methyl isobutyl Ketone (MIBK) from Acetone plant ?**
5. **What is the structure of the Methyl isobutyl Ketone (MIBK) from Acetone Business and who are the key/major players ?**

- 6. What is the total project cost for setting up Methyl isobutyl Ketone (MIBK) from Acetone plant ?**
- 7. What are the operating costs for setting up a Methyl isobutyl Ketone (MIBK) from Acetone plant ?**
- 8. What are the machinery and equipment requirements for setting up a Methyl isobutyl Ketone (MIBK) from Acetone plant ?**
- 9. Who are the Suppliers and Manufacturers of Plant & Machinery for setting up a Methyl isobutyl Ketone (MIBK) from Acetone plant ?**
- 10. What are the requirements of raw material for setting up a Methyl isobutyl Ketone (MIBK) from Acetone plant ?**

- 11. Who are the Suppliers and Manufacturers of Raw materials for setting up a Methyl isobutyl Ketone (MIBK) from Acetone plant ?**
- 12. What is the Manufacturing Process and Formulations of a Methyl isobutyl Ketone (MIBK) from Acetone plant ?**
- 13. What is the total size of land required for setting up a Methyl isobutyl Ketone (MIBK) from Acetone plant ?**
- 14. What will be the income and expenditures for a Methyl isobutyl Ketone (MIBK) from Acetone plant ?**
- 15. What are the Projected Balance Sheets of a Methyl isobutyl Ketone (MIBK) from Acetone plant ?**

- 16. What are the requirement of utilities and overheads for setting up a Methyl isobutyl Ketone (MIBK) from Acetone plant?**
- 17. What is the Built up Area Requirement and cost for setting up a Methyl isobutyl Ketone (MIBK) from Acetone Business?**
- 18. What are the Personnel (Manpower) Requirements for setting up a Methyl isobutyl Ketone (MIBK) from Acetone Business?**
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Who are we?

- *One of the leading reliable names in industrial world for providing the most comprehensive technical consulting services*
- *We adopt a systematic approach to provide the strong fundamental support needed for the effective delivery of services to our Clients' in India & abroad*

What do we offer?

- *Project Identification*
- *Detailed Project Reports/Pre-feasibility Reports*
- *Market Research Reports*
- *Technology Books and Directory*
- *Databases on CD-ROM*
- *Laboratory Testing Services*
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- *Entrepreneur India (An Industrial Monthly Journal)*

How are we different ?

- *We have two decades long experience in project consultancy and market research field*
- *We empower our customers with the prerequisite know-how to take sound business decisions*
- *We help catalyze business growth by providing distinctive and profound market analysis*
- *We serve a wide array of customers , from individual entrepreneurs to Corporations and Foreign Investors*
- *We use authentic & reliable sources to ensure business precision*

Our Approach

Requirement collection

Thorough analysis of the project

Economic feasibility study of the Project

Market potential survey/research

Report Compilation

Who do we serve?

- *Public-sector Companies*
- *Corporates*
- *Government Undertakings*
- *Individual Entrepreneurs*
- *NRI's*
- *Foreign Investors*
- *Non-profit Organizations, NBFC's*
- *Educational Institutions*
- *Embassies & Consulates*
- *Consultancies*
- *Industry / trade associations*

Sectors We Cover

- *Ayurvedic And Herbal Medicines, Herbal Cosmetics*
- *Alcoholic And Non Alcoholic Beverages, Drinks*
- *Adhesives, Industrial Adhesive, Sealants, Glues, Gum & Resin*
- *Activated Carbon & Activated Charcoal*
- *Aluminium And Aluminium Extrusion Profiles & Sections,*
- *Bio-fertilizers And Biotechnology*
- *Breakfast Snacks And Cereal Food*
- *Bicycle Tyres & Tubes, Bicycle Parts, Bicycle Assembling*

- *Bamboo And Cane Based Projects*
- *Building Materials And Construction Projects*
- *Biodegradable & Bioplastic Based Projects*
- *Chemicals (Organic And Inorganic)*
- *Confectionery, Bakery/Baking And Other Food*
- *Cereal Processing*
- *Coconut And Coconut Based Products*
- *Cold Storage For Fruits & Vegetables*
- *Coal & Coal Byproduct*

- *Copper & Copper Based Projects*
- *Dairy/Milk Processing*
- *Disinfectants, Pesticides, Insecticides, Mosquito Repellents,*
- *Electrical, Electronic And Computer based Projects*
- *Essential Oils, Oils & Fats And Allied*
- *Engineering Goods*
- *Fibre Glass & Float Glass*
- *Fast Moving Consumer Goods*
- *Food, Bakery, Agro Processing*

- *Fruits & Vegetables Processing*
- *Ferro Alloys Based Projects*
- *Fertilizers & Biofertilizers*
- *Ginger & Ginger Based Projects*
- *Herbs And Medicinal Cultivation And Jatropha (Biofuel)*
- *Hotel & Hospitality Projects*
- *Hospital Based Projects*
- *Herbal Based Projects*
- *Inks, Stationery And Export Industries*

- *Infrastructure Projects*
- *Jute & Jute Based Products*
- *Leather And Leather Based Projects*
- *Leisure & Entertainment Based Projects*
- *Livestock Farming Of Birds & Animals*
- *Minerals And Minerals*
- *Maize Processing(Wet Milling) & Maize Based Projects*
- *Medical Plastics, Disposables Plastic Syringe, Blood Bags*
- *Organic Farming, Neem Products Etc.*

- *Paints, Pigments, Varnish & Lacquer*
- *Paper And Paper Board, Paper Recycling Projects*
- *Printing Inks*
- *Packaging Based Projects*
- *Perfumes, Cosmetics And Flavours*
- *Power Generation Based Projects & Renewable Energy Based Projects*
- *Pharmaceuticals And Drugs*
- *Plantations, Farming And Cultivations*
- *Plastic Film, Plastic Waste And Plastic Compounds*
- *Plastic, PVC, PET, HDPE, LDPE Etc.*

- *Potato And Potato Based Projects*
- *Printing And Packaging*
- *Real Estate, Leisure And Hospitality*
- *Rubber And Rubber Products*
- *Soaps And Detergents*
- *Stationary Products*
- *Spices And Snacks Food*
- *Steel & Steel Products*
- *Textile Auxiliary And Chemicals*

- *Township & Residential Complex*
- *Textiles And Readymade Garments*
- *Waste Management & Recycling*
- *Wood & Wood Products*
- *Water Industry(Packaged Drinking Water & Mineral Water)*
- *Wire & Cable*

Niir Project Consultancy Services

106-E, Kamla Nagar, New Delhi-110007, India.

Email: npcs.ei@gmail.com , info@entrepreneurindia.co

Tel: +91-11-23843955, 23845654, 23845886

Mobile: +91-9811043595

Fax: +91-11-23841561

Website : www.entrepreneurindia.co

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