Y-1620


# Manufacturing of Sodium Borohydride (Sodium Tetrahydridoborate) using Trimethyl Borate.

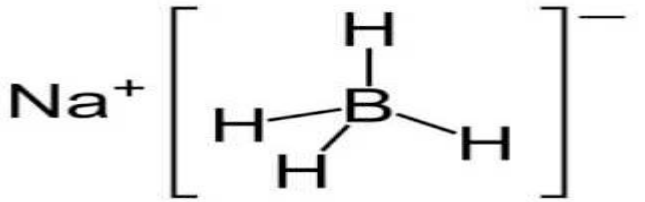
## Most Demanding Profitable Business Idea in Chemical Industry.

# Introduction

Sodium borohydride, also known as sodium tetrahydridroborate and sodium tetrahydroborate. Is an inorganic compound with the formula NaBH. This white solid, sometimes encountered as a powder, is a reducer that finds application in chemistry, each within the laboratory and on an industrial scale. It been tested as pretreatment for pulping of wood, however is too pricey to be commercialized. The compound is soluble in alcohols, certain ethers, and water, although it slowly hydrolyzes.

**Projects-** **Project Reports & Profiles**

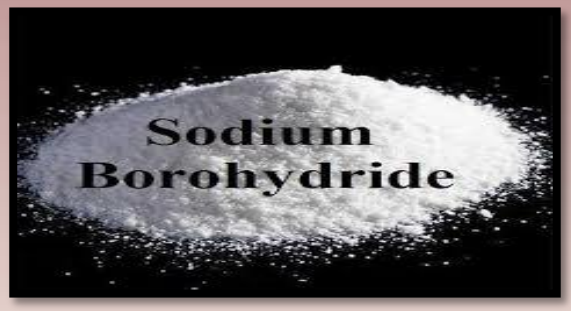
Sodium borohydride



Sodium Borohydride is used as a chemical agent within the reduction of amino acids and their derivatives. Additionally utilized in the catalysis of ammonia borane dehydrogenation.

Reducing agent for aldehydes, ketones and Schiff bases in no binary compound solvents. Also reduces acids, esters, acid chlorides, disulfides, nitriles, inorganic anions. More used to generate diborane, as foaming agent, as scavenger for traces of aldehyde, ketones and peroxides in organic chemicals.

**Related Projects: - Chemicals (Organic, Inorganic, Industrial) Projects**



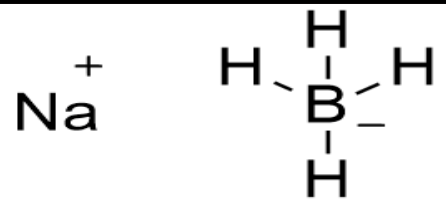
# Preparation

Sodium borohydride can be prepared on an industrial scale by treating Trimethyl borate with sodium hydride at a temperature range of 250-27oC. The balanced chemical equation for this reaction is given by:

$4NaH + B(OCH_3)_3 \rightarrow 3NaOCH_3 + NaBH_4$

Alternately, this compound can also be prepared by reacting borax, metallic sodium, dihydrogen, and silicon dioxide at a temperature of 700oC. This reaction can be represented as follows:

$Na_2B_4O_7 + 8H_2 + 16Na + 7SiO_2 \rightarrow 7Na_2SiO_3 + 4NaBH_4$




Sodium Borohydride

# Properties of Sodium Borohydride

## Physical Properties of NaBH4

The molar mass of NaBH4 is 37.83 grams per mole.

This compound does not have any characteristic odour.

The density of sodium borohydride at STP corresponds to 1.07 grams per cubic centimeter.

It has a melting point of 673K. However, it tends to undergo decomposition at this temperature.

**Related Books: -** Chemical Technology (Organic, Inorganic, Industrial), Fine Chemicals

## Chemical Properties of NaBH4

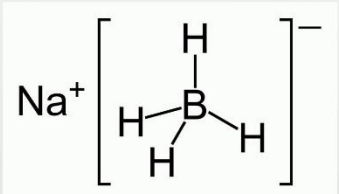
Despite being soluble in most protic solvents (like water), this compound slowly reacts with the protic solvent, resulting in the formation of dihydrogen.

Sodium borohydride generally undergoes decomposition in acidic and aqueous media but not in basic media.

This compound is a reducing agent and can reduce a wide spectrum of organic carbonyls.

NaBH4 also releases hydrogen when exposed to many metal catalysts.

**Sodium borohydride**



## Uses

Sodium borohydride (NaBH4) could be a versatile reducing agent utilized in variety of industrial processes. Major applications include organic and pharmaceutical synthesis, wastewater treatment, and paper pulp bleaching. Metal borohydride plays such a significant role in organic synthesis. It's an honest reducing agent which has stable performance and selective reduction. It may be used because the reducing agents of aldehydes, ketones and acid chlorides; also as foaming agent for plastic materials, hydrogenating agent of constructing dihydrostreptomycin, intermediate of constructing potassium borohydride, raw materials in synthesizing borane, as well because the treatment agent of paper business and mercury-containing waste water.

Sodium borohydride provides organic chemists an awfully convenient and gentle suggests that for reduction of aldehydes and ketones. Before this, individuals usually use metal/alcohol approach to scale back carbonyl compound. Sodium borohydride permits the reduction of carbonyl of aldehydes and ketones below terribly mild conditions to produce primary alcohols and secondary alcohols. Reduction procedure is as below: first dissolve the substrate in an exceedingly solvent (typically methanol or ethanol), then cool with an ice bath. Finally add metal borohydride powder to the mixture till the reaction is completed. The reaction process will be monitored by thin layer chromatography. If the solvent isn't an alcohol, we'd like to boot supply methanol or ethanol along with the reaction. Sodium borohydride could be a reducing agent with medium strength, and so exhibiting sensible chemical property. It solely reduces active aldehyde and ketone chemical group, and does not react with the ester, amide.

Sodium borohydride could be a white to grayish crystalline powder. Sodium borohydride is rotten by water to form sodium hydroxide, a corrosive material, and H, a combustible gas. The heat of this reaction could also be sufficient to ignite the hydrogen. The fabric itself is well ignited and burns vigorously once ignited. Sodium borohydride is used to create different chemicals, treat waste water, and for several alternative uses.

## Applications

- Blowing agent
- Pharmaceuticals
- Pulp & Paper
- Metal Recovery
- Textiles
- Organic Chemical Purification
- Agrochemicals
- Electronic Products

## Benefits

- Reduce sulfur dioxide to produce sodium dithionite
- Reduce aldehydes, ketones and acyl chloride to give the related alcohols
- Store, release and reabsorb hydrogen under moderate conditions
- Releases hydrogen in the presence of metal catalysts
- Replace mercury (Hg) with h
- Reduce Hg2+ to remove Hg in wastewater
- Pretreatment process
- Releases hydrogen to blow in material

**Related Videos:-** **Chemicals (Organic, Inorganic, Industrial)**

# Production Methods

Sodium borohydride boric acid ester method: Pour boric acid and applicable amount of methanol to distillation kettle, slowly heated at 54 °C for total reflux 2h. Then collect the azeotropic liquid of methyl borate and methanol solution. After treatment of azeotropic liquid by sulfuric acid, using fine distillation can yield relative pure product. Feed sodium hydrogen obtained with reaction between hydrogen gas and sodium into the condensation reaction tank. Heat with stirring to regarding 220 °C and then begin to feature boric acid ester. Stop heating once the temperature reaches 260 °C; Keep the feed temperature below 280 °C, continue the stirring when the addition of boric acid ester to make sure the thorough reaction.

After the completion of reaction, cool the temperature below 100 °C, centrifuge to get a condensation product pellet. Add an appropriate amount of water to the hydrolysis reactor and slowly transfer the filter pellet into the hydrolysis reactor, keep the temperature not up to 50 °C, heat to 80 °C after the complete of adding the filter pellet. Centrifuge and separate, transfer the hydrolysis solution to stratification vessel to stay still for 1h for automatic layering. The hydrolysis solution within the lower layer corresponds to sodium borohydride. The reaction formula is as below:

$H_3BO_3+3CH_3OH \rightarrow B(OCH_3)_3+3H_2O$

$2Na+H_2 \rightarrow 2NaH$

$4NaH+B(OCH_3)_3 \rightarrow NaBH_4+3CH_3ONa$

## Manufacturing Process

The manufacturing process can be summarized in following steps.

The Trimethyl borate and the sodium aluminum hydride react to form sodium borohydride according to the following equation.

$B(OCH_3)_3 + NaAlH_4 \rightarrow NaBH_4 + Al(OCH_3)_3$

Trimethyl Borate Sodium Aluminum Hydride Sodium Borohydride

The sodium borohydride and the aluminium product are separated by dissolving the aluminium product in a suitable solvent Toluene in which the sodium borohydride is substantially insoluble. Then filtration to separate the insoluble sodium borohydride, dry the product and packed in the bags.

# Market Outlook

The global Sodium Borohydride market is valued at 536.3 million USD in 2020 is expected to reach 881.9 million USD by the end of 2026, growing at a CAGR of 7.3% during 2021-2026. Furthermore, Sodium borohydride used in the manufacture of reductive bleach to enhance magazine and newsprint grade paper, the pulp and paper industry is the largest market for Sodium Borohydride products. The demand for sodium borohydride in the paper and pulp industry will remain high due the rising demand for paper in the packing industry. In metal recover it is extremely effective for reducing metal ions back to their free metal state and is an economic way to remove metals such as silver, copper, and nickel from chelated wastewater streams.

Geographically, North America held the most important share within the global sodium borohydride market whereas Asia Pacific is that the largest producer in 2017. These 2 regions can seemingly hold a considerable share by 2026. Since the merchandise demand is directly joined with the antibiotics consumption, the Asia pacific region being the most populous region within the world with low quality healthcare has the highest scope for the sodium borohydride market. Furthermore, Asia Pacific is expected to be the strongest contender within the global market because of the rising pharmaceutical activities in emerging economies similar to India and China.

The global sodium Borohydride market may be divided supported end-user and region. based on end-user, the global sodium Borohydride market may be divided into pharmaceuticals, agrochemicals, electronic products, textiles, pulp & paper, metal recovery, organic chemical purification, others. Supported region, the worldwide sodium Borohydride market may be divided into North America, Latin America, Europe, Middle East & Africa and Asia Pacific. Currently, the Asia-Pacific region is that the largest consumer of sodium Borohydride and is calculable to grow at the highest CAGR. Countries similar to China, Japan, and India are expected to steer the Asia-Pacific sodium Borohydride market, with China expected to account for the highest share within the regional demand of Sodium Borohydride. Moreover, China is further projected to account for the highest share in the global market and is anticipated to grow throughout the forecasted amount.

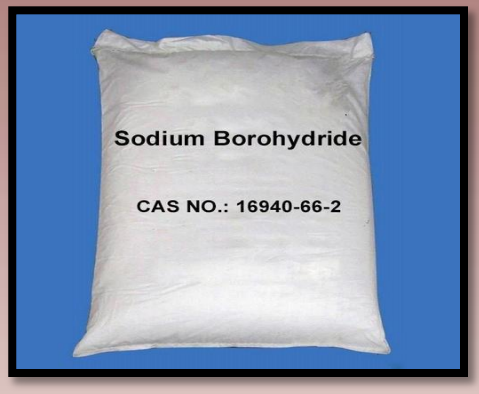
This will be attributed to fast industrialization and increasing urbanization during the past few years. The markets in various different developing economies similar to Brazil, Russia and Korea and India among others are also expected to witness a rapid growth throughout the forecast period. Additionally to the present, rising per capita income and surge within the international economy is another key factor that is expected to bring impetus within the growth of the worldwide market.

Sodium borohydride market can witness growth on the account of its application to provide sodium dithionite, a reductant utilized in wood pulp and bleaching industries. Sodium dithionite is also used to manufacture alcohols by reducing aldehydes and ketones that are used to manufacture various antibiotics. Growing antibiotics demand within the underdeveloped countries of Asia Pacific and Middle East & Africa can propel the world sodium borohydride market within the coming back years.

## Global Sodium Borohydride Market: Dynamics

Rapidly growing analysis and development activities regarding drugs and therefore the prosperous paper and pulp industry have increased the necessity of reducing agents for various end-use applications in several regions across the globe. The analysis and development activities for sodium borohydride is increasing due to the growing pulp and paper business. This successively is expected to make a positive impact for the sodium borohydride market within the coming back years because the product has wide application in organic chemical purification that in turn is expected to drive the sodium borohydride market globally.

This increase within the demand from different applications in various end-use industries acts as a driving factor for the worldwide carbon nitride market. The paper and pulp business is expected to be propelled by the rising demand for the packaging product and the increase in analysis and development activities within the pharmaceutical industry for inventing new medical drugs and therefore the use of sodium borohydride as a hydrogen carrier in fuel cell is expected to supply major opportunities for the sodium borohydride market across the world.



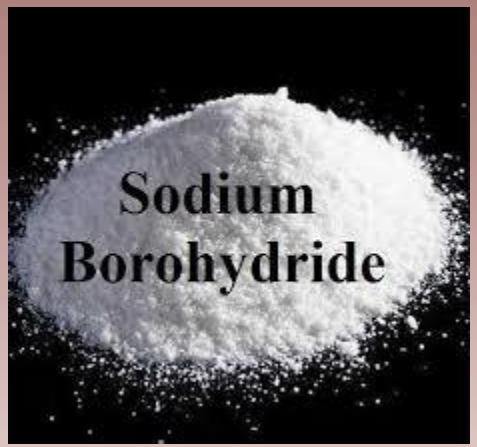
# Lucrative Opportunities for Players in Global Sodium Borohydride Market

Hydrogen is regarded as a significant alternative sustainable energy resource because of its abundant availability, high-energy density, and lack of adverse environmental impact. Sodium borohydride has a high hydrogen storage capability and is relatively stable. The concerning scenario related to environmental pollution and depletion of fossil energy resources intensifies the need for renewable and clean energy resource for the future.

In hydrogen-on-demand systems, sodium borohydride will be wont to release hydrogen as needed and therefore the inert salt degraded in the chemical reaction process can be recycled to re-form sodium borohydride.

Hydrogen is used in fuel cells to generate electricity and in combustion engines for power generation.

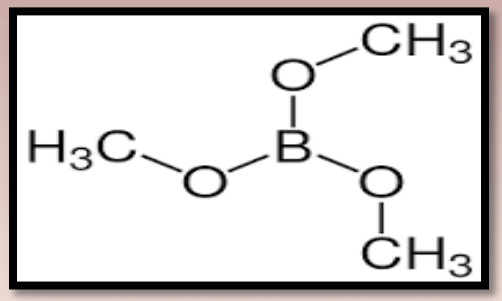
This technology therefore exhibits immense potential in the automotive sector, therefore providing lucrative opportunities within the near future.



## Increasing Use of Sodium Borohydride in Pharmaceutical Industry to Boost the Market

The market for sodium borohydride is increasing because of increasing demand from pharmaceutical industries, as they act as an important raw material utilized in making various pharmaceutical product. Increasing efforts in research and developments for antibiotics as a reason for growing awareness within the healthcare sector.

Additionally, the demand for innovative technology similar to gas on demand has significantly grown, therefore creating huge opportunities for sodium borohydride market within the coming years.



Furthermore, expanding paper and pulp business requiring sodium borohydride at a significant quality has contributed to increase the revenue within the market. Increasing demand for Electronic products and agrochemicals with organic chemical purification, textile, and metal recovery have contributed to grow the market. These are the driving factors that will boost the demand for sodium borohydride within the coming back years.

**Projects- Project Reports & Profiles**

## Key Players

Examples of some of the key players identified across the value chain of the Global Sodium Borohydride market are: Zhangjiagang City Jinyuan Biochemical Co., Ltd, Jiangsu Huachang Group Co., Ltd, Shandong Guobang Pharmaceutical Co., Ltd, JSC Aviabor, Vertellus Holdings LLC, The Dow Chemical Company, Nantong Hongzhi Chemical Co., Ltd, Montgomery Chemicals, Kemira, Demosha Chemicals Pvt. Ltd, Finar Ltd, Gulbrandsen Chemicals Pvt. Ltd, Gulshan Chemicals Ltd,

# Machinery Photographs

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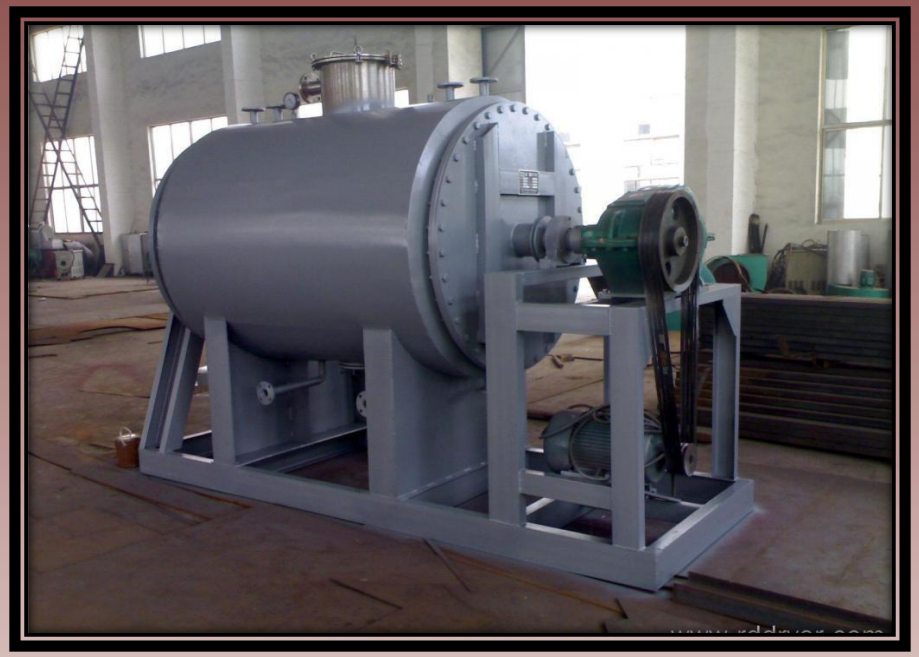

VACUUM DRYER


**AIR COMPRESSOR**

**FUEL STORAGE TANK**

# Project at a Glance



| COST OF PROJECT | | | | MEANS OF FINANCE | | | |
|---|---|---|---|---|---|---|---|
| Particulars | Existing | Proposed | Total | Particulars | Existing | Proposed | Total |
| Land & Site Development Exp. | 0.00 | 15.00 | 15.00 | Capital | 0.00 | 177.69 | 177.69 |
| Buildings | 0.00 | 210.60 | 210.60 | Share Premium | 0.00 | 0.00 | 0.00 |
| Plant & Machineries | 0.00 | 91.50 | 91.50 | Other Type Share Capital | 0.00 | 0.00 | 0.00 |
| Motor Vehicles | 0.00 | 10.00 | 10.00 | Reserves & Surplus | 0.00 | 0.00 | 0.00 |
| Office Automation Equipments | 0.00 | 42.00 | 42.00 | Cash Subsidy | 0.00 | 0.00 | 0.00 |
| Technical Knowhow Fees & Exp. | 0.00 | 40.00 | 40.00 | Internal Cash Accruals | 0.00 | 0.00 | 0.00 |
| Franchise & Other Deposits | 0.00 | 0.00 | 0.00 | Long/Medium Term Borrowings | 0.00 | 533.08 | 533.08 |
| Preliminary& Pre-operative Exp | 0.00 | 3.00 | 3.00 | Debentures / Bonds | 0.00 | 0.00 | 0.00 |
| Provision for Contingencies | 0.00 | 8.00 | 8.00 | Unsecured Loans/Deposits | 0.00 | 0.00 | 0.00 |
| Margin Money - Working Capital | 0.00 | 290.67 | 290.67 | | | | |
| TOTAL | 0.00 | 710.77 | 710.77 | TOTAL | 0.00 | 710.77 | 710.77 |

# 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 | |
| | ` | ` | ` | ` | ` | % | ` | % | ` | | % |
| 1-2 | 6.69 | 9.27 | 16.69 | 24.00 | 0.00 | 100.00 | 6.69 | 0.00 | 6.69 | 1.00 | 0.00 |
| 2-3 | 9.36 | 11.67 | 26.05 | 18.00 | 0.00 | 100.00 | 9.36 | 0.00 | 9.36 | 1.00 | 0.00 |
| 3-4 | 12.23 | 14.29 | 38.28 | 12.00 | 0.00 | 100.00 | 12.23 | 0.00 | 12.23 | 1.00 | 0.00 |
| 4-5 | 15.01 | 16.85 | 53.30 | 6.00 | 0.00 | 100.00 | 15.01 | 0.00 | 15.01 | 1.00 | 0.00 |
| 5-6 | 17.67 | 19.32 | 70.97 | 0.00 | 0.00 | 100.00 | 17.67 | 0.00 | 17.67 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Individual | Cumulative | Overall | | | | | GPM | PBT | PAT | Net Contribution | P/V Ratio | | |
| | (Number of times) | | | (Number of times) | | % | % | % | % | % | | % | | |
| Initial | | | | 3.00 | 3.00 | | | | | | | | | |
| 1-2 | 1.35 | 1.35 | | 1.44 | 1.44 | 8.84 | | 2.65% | 1.20% | 0.78% | 782.85 | 5.15% | 5.28 | 1.11 |
| 2-3 | 1.66 | 1.50 | | 0.69 | 0.69 | 6.16 | | 2.83% | 1.46% | 0.94% | 889.71 | 5.02% | 5.41 | 1.13 |
| 3-4 | 2.05 | 1.67 | 2.05 | 0.31 | 0.31 | 4.57 | | 2.96% | 1.69% | 1.07% | 1016.25 | 5.01% | 5.39 | 1.16 |
| 4-5 | 2.51 | 1.85 | | 0.11 | 0.11 | 3.55 | | 3.04% | 1.85% | 1.17% | 1142.79 | 5.01% | 5.32 | 1.20 |
| 5-6 | 3.06 | 2.05 | | 0.00 | 0.00 | 2.87 | | 3.09% | 1.96% | 1.24% | 1269.33 | 5.01% | 5.22 | 1.28 |

# Project at a Glance



| | |
|---|---|
| BEP | |
| BEP - Maximum Utilisation Year | 5 |
| Cash BEP (% of Installed Capacity) | 58.28% |
| Total BEP (% of Installed Capacity) | 60.59% |
| IRR, PAYBACK and FACR | |
| Internal Rate of Return .. ( In %age ) | 31.69% |
| Payback Period of the Project is ( In Years ) | 2 Years 3 Months |
| Fixed Assets Coverage Ratio ( No. of times ) | 111.349 |

# Major Queries/Questions Answered in the Report?

1. What is Sodium Borohydride using Trimethyl Borate Manufacturing industry ?

2. How has the Sodium Borohydride using Trimethyl Borate Manufacturing industry performed so far and how will it perform in the coming years ?

3. What is the Project Feasibility of Sodium Borohydride using Trimethyl Borate Manufacturing Plant ?

4. What are the requirements of Working Capital for setting up Sodium Borohydride using Trimethyl Borate Manufacturing plant ?

5. What is the structure of the Sodium Borohydride using Trimethyl Borate Manufacturing Business and who are the key/major players ?

6. What is the total project cost for setting up Sodium Borohydride using Trimethyl Borate Manufacturing Business?

7. What are the operating costs for setting up Sodium Borohydride using Trimethyl Borate Manufacturing plant ?

8. What are the machinery and equipment requirements for setting up Sodium Borohydride using Trimethyl Borate Manufacturing plant ?

9. Who are the Suppliers and Manufacturers of Plant & Machinery for setting up Sodium Borohydride using Trimethyl Borate Manufacturing plant ?

10. What are the requirements of raw material for setting up Sodium Borohydride using Trimethyl Borate Manufacturing plant ?

11. Who are the Suppliers and Manufacturers of Raw materials for setting up Sodium Borohydride using Trimethyl Borate Manufacturing Business?

12. What is the Manufacturing Process of Sodium Borohydride using Trimethyl Borate ?

13. What is the total size of land required for setting up Sodium Borohydride using Trimethyl Borate Manufacturing plant ?

14. What will be the income and expenditures for Sodium Borohydride using Trimethyl Borate Manufacturing Business?

15. What are the Projected Balance Sheets of Sodium Borohydride using Trimethyl Borate Manufacturing plant ?

16. What are the requirement of utilities and overheads for setting up Sodium Borohydride using Trimethyl Borate Manufacturing plant?

17. What is the Built up Area Requirement and cost for setting up Sodium Borohydride using Trimethyl Borate Manufacturing Business?

18. What are the Personnel (Manpower) Requirements for setting up Sodium Borohydride using Trimethyl Borate Manufacturing Business?

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22. What are the Project financials of Sodium Borohydride using Trimethyl Borate Manufacturing Business?

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27. What are the Market Opportunities for setting up Sodium Borohydride using Trimethyl Borate Manufacturing plant?

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# Reasons for Buying our Report:

- This report helps you to identify a profitable project for investing or diversifying into by throwing light to crucial areas like industry size, market potential of the product and reasons for investing in the product
- This report provides vital information on the product like it's characteristics and segmentation
- This report helps you market and place the product correctly by identifying the target customer group of the product

- This report helps you understand the viability of the project by disclosing details like machinery required, project costs and snapshot of other project financials
- The report provides a glimpse of government regulations applicable on the industry
- The report provides forecasts of key parameters which helps to anticipate the industry performance and make sound business decisions

# Our Approach:

- Our research reports broadly cover Indian markets, present analysis, outlook and forecast for a period of five years.
- The market forecasts are developed on the basis of secondary research and are cross-validated through interactions with the industry players
- We use reliable sources of information and databases. And information from such sources is processed by us and included in the report

# Scope of the Report

The report titled "Market Survey cum Detailed Techno Economic Feasibility Report on Sodium Borohydride using Trimethyl Borate." provides an insight into Sodium Borohydride using Trimethyl Borate market in India with focus on uses and applications, Manufacturing Process, Process Flow Sheets, Plant Layout and Project Financials of Sodium Borohydride using Trimethyl Borate project. The report assesses the market sizing and growth of the Indian Sodium Borohydride using Trimethyl Borate Industry. While expanding a current business or while venturing into new business, entrepreneurs are often faced with the dilemma of zeroing in on a suitable product/line. And before diversifying/venturing into any product, they wish to study the following aspects of the identified product:

- Good Present/Future Demand
- Export-Import Market Potential
- Raw Material & Manpower Availability
- Project Costs and Payback Period

**We at NPCS, through our reliable expertise in the project consultancy and market research field, have demystified the situation by putting forward the emerging business opportunity in the Sodium Borohydride using Trimethyl Borate sector in India along with its business prospects. Through this report we have identified Sodium Borohydride using Trimethyl Borate project as a lucrative investment avenue.**

# Tags

#sodiumborohydride #SodiumHydride #TrimethylBorate #ChemicalIndustry #DetailedProjectReport #businessconsultant #BusinessPlan #feasibilityReport #NPCS #industrialproject #entrepreneurindia #startupbusiness #startupbusinessideas #startupideas

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https://goo.gl/VstWkd

## *Locate us on*

## *Google Maps*

**https://goo.gl/maps/BKkUtq9gevT2**

# OUR CLIENTS

Our inexhaustible Client list includes public-sector companies, Corporate Houses, Government undertaking, individual entrepreneurs, NRI, Foreign investors, non-profit organizations and educational institutions from all parts of the World. The list is just a glimpse of our esteemed & satisfied Clients.

**Click here to take a look**

**https://goo.gl/G3ICjV**

# Select and Choose the Right Business Startup for You

## (Instant Online Project Identification and Selection)

**Finding the right startup business is one of the most popular subject today. Starting a business is no easy endeavor, but the time, effort, and challenges can be worth it if you succeed. To give yourself the best chance to be successful, take your time to carefully find the right business for you. We, at NPCS, endeavor to make business selection a simple and convenient step for any entrepreneur/startup. Our expert team, by capitalizing on its dexterity and decade's long experience in the field, has created a list of profitable ventures for entrepreneurs who wish to diversify or venture. The list so mentioned is updated regularly to give you a regular dose of new emerging opportunities.**

**Visit:** https://www.entrepreneurindia.co/project-identification

# Download Complete List of Project Reports:

- **Detailed Project Reports**

**Visit:- https://www.entrepreneurindia.co/complete-project-list**

**NPCS is manned by engineers, planners, specialists, financial experts, economic analysts and design specialists with extensive experience in the related industries.**

**Our Market Survey cum Detailed Techno Economic Feasibility Report provides an insight of market in India. The report assesses the market sizing and growth of the Industry. While expanding a current business or while venturing into new business, entrepreneurs are often faced with the dilemma of zeroing in on a suitable product/line.**

**And before diversifying/venturing into any product, they wish to study the following aspects of the identified product:**

- **Good Present/Future Demand**
- **Export-Import Market Potential**
- **Raw Material & Manpower Availability**
- **Project Costs and Payback Period**

**The detailed project report covers all aspect of business, from analyzing the market, confirming availability of various necessities such as Manufacturing Plant, Detailed Project Report, Profile, Business Plan, Industry Trends, Market Research, Survey, Manufacturing Process, Machinery, Raw Materials, Feasibility Study, Investment Opportunities, Cost and Revenue, Plant Economics, Production Schedule,**

**Working Capital Requirement, uses and applications, Plant Layout, Project Financials, Process Flow Sheet, Cost of Project, Projected Balance Sheets, Profitability Ratios, Break Even Analysis. The DPR (Detailed Project Report) is formulated by highly accomplished and experienced consultants and the market research and analysis are supported by a panel of experts and digitalized data bank.**

**We at NPCS, through our reliable expertise in the project consultancy and market research field, have demystified the situation by putting forward the emerging business opportunity in India along with its business prospects.....Read more**

# Contact us


**NIIR PROJECT CONSULTANCY SERVICES**

**106-E, Kamla Nagar, Opp. Mall ST,**

**New Delhi-110007, India.**

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

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

**Mobile: +91-9097075054, 8800733955**

**Fax: +91-11-23845886**

**Website : www.entrepreneurindia.co , www.niir.org**


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# NIIR PROJECT CONSULTANCY SERVICES

**AN ISO 9001: 2015 CERTIFIED COMPANY**

# 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*

*We at NPCS want to grow with you by providing solutions scale to suit your new operations and help you reduce risk and give a high return on application investments. We have successfully achieved top-notch quality standards with a high level of customer appreciation resulting in long lasting relation and large amount of referral work through technological breakthrough and innovative concepts. A large number of our Indian, Overseas and NRI Clients have appreciated our expertise for excellence which speaks volumes about our commitment and dedication to every client's success.*

*We bring deep, functional expertise, but are known for our holistic perspective: we capture value across boundaries and between the silos of any organization. We have proven a multiplier effect from optimizing the sum of the parts, not just the individual pieces. We actively encourage a culture of innovation, which facilitates the development of new technologies and ensures a high quality product.*

# What do we offer?

- *Project Identification*
- *Detailed Project Reports/Pre-feasibility Reports*
- *Market Research Reports*
- *Business Plan*
- *Technology Books and Directory*
- *Industry Trend*
- *Databases on CD-ROM*
- *Laboratory Testing Services*
- *Turnkey Project Consultancy/Solutions*
- *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

## Sectors We Cover *Cont...*

- 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

## Sectors We Cover *Cont...*

- 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

## Sectors We Cover *Cont...*

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

## Sectors We Cover

***Cont...***

- 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.

## Sectors We Cover *Cont...*

- 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.

## Sectors We Cover *Cont...*

- 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

## Sectors We Cover *Cont...*

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

# MARKET RESEARCH REPORTS

# Objective

- To get a detailed scenario of the industry along with its structure and classification
- To provide a comprehensive analysis of the industry by covering aspects like:
  - Growth drivers of the industry
  - Latest market trends
  - Insights on regulatory framework
  - SWOT Analysis
  - Demand-Supply Situation
  - Foreign Trade
  - Porters 5 Forces Analysis

# Objective

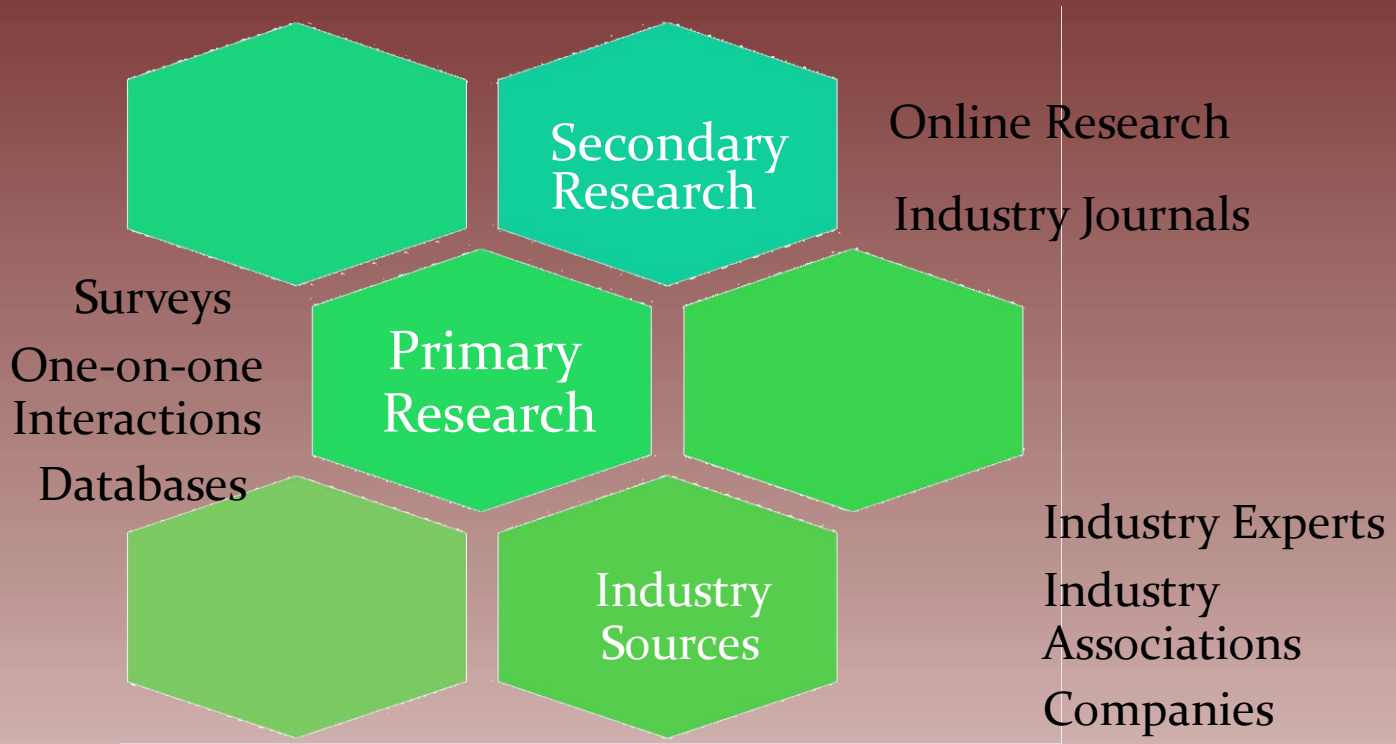
- To provide forecasts of key parameters which helps to anticipate the industry performance
- To help chart growth trajectory of a business by detailing the factors that affect the industry growth
- To help an entrepreneur/manager in keeping abreast with the changes in the industry
- To evaluate the competitive landscape of the industry by detailing:
  - Key players with their market shares
  - Financial comparison of present players

# Clientele

- Venturist/Capitalists
- Entrepreneur/Companies
- Industry Researchers
- Investment Funds
- Foreign Investors, NRI's
- Project Consultants/Chartered Accountants
- Banks
- Corporates

Click here for list

# Data Sources



# Scope & Coverage

# Our Team

- Our research team comprises of experts from various financial fields:
- MBA's
- Industry Researchers
- Financial Planners
- Research veterans with decades of experience

# Structure of the Report

- 1. Overview
- 2. Market Analysis
  - 2.1Growth Drivers
  - 2.2Emerging Trends in the Industry
  - 2.3Regulatory Framework
  - 2.4SWOT Analysis
  - 2.5Herfindahl–Hirschman Index (HHI)
- 3. Market Forecasts
- 4. Key Players

# Structure of the Report

Cont

- 5. Key Financials and Analysis
- 5.1 Contact Information
- 5.2 Key Financials
- 5.3 Financial comparison
- 6. Industry Size & Outlook

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# Contact us

## NIIR PROJECT CONSULTANCY SERVICES


106-E, Kamla Nagar, Opp. Mall ST,

New Delhi-110007, India.

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

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

Mobile: +91-9097075054, 8800733955

Fax: +91-11-23845886

Website : www.entrepreneurindia.co , www.niir.org


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# THANK YOU

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